DOCUMENT RESUME

ED 200 366 RC 012 603

AUTHOR Porter, William W.
TITLE The Development and Evaluation of the Wilderness Experience Program.
PUB DATE [75]
NOTE 130p.; Best copy available.

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Adventure Education; *Behavior Modification; *Educational Therapy; Elementary Secondary Education; *Outdoor Education; Peer Relationship; Personality Measures; Problem Solving; Program Development; *Program Evaluation; Self Esteem; Student Responsibility; *Therapeutic Environment; Transfer of Training
IDENTIFIERS Transactional Analysis; Wilderness Education Programs; *Wilderness Experience Program CO

ABSTRACT

A therapeutic approach, including transactional analysis, assertiveness training, personal causation and modeling theories, was effectively incorporated into the Wilderness Experience Program (WEP) for problem youth, to meet the goal of developing an emancipated individual who could assume responsibility, develop realistic self-expectancies and trust others. A review of the literature and evaluation of the 1971 and 1972 WEP programs, which largely served economically deprived children, indicated the therapeutic potential of the wilderness; more sophisticated evaluations were needed to substantiate the reported positive outcomes. Evaluation of 124 participants in the 1973 program and 54 participants in the winter 1974 program by two paper and pencil inventories (A self-esteem measure and a behavioral rating form) indicated positive results in both programs. A control group for the 1974 program showed no consistent improvement on the measures. Furthermore, the results suggested transfer of the newly acquired problem-solving skills learned in the wilderness environment to school and home environments. It was concluded that more extensive evaluation and more sophisticated research could isolate the change associations more accurately. The development of WEP, program designs and therapeutic methods used, discussions of staff selection and training, and tables of results are included. Copies of the testing instruments and an outline of the 1973 program are appended. (AN)

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THE DEVELOPMENT AND EVALUATION OF THE WILDERNESS EXPERIENCE PROGRAM

By William W. Porter

[1975]

[Denver, Colorado]

RC 012603

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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ACKNOWLEDGEMENTS

The development of the Wilderness Experience Program has been made possible through the continued support of the community, especially the Jeffco Action Center.

The author wishes to thank Dr. Z. J. Ulehla for having introduced me to the program and for his continued interest in its growth. I am indebted to Professors Dave Mettee, thesis chairmain, Nick Braucht and, again, Joe Ulehla for their continued patience and support in drafting the historical development and evaluation of WEP.

A special note of thanks to Mark Foster and Carol Ward for their guidance in the statistical analyses of WEP.

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CHAPTER 1

Literature Overview

Many approaches to therapeutic program development for problem children have been explored (Beder, 1960; Lovass, 1966; Berne, 1967; Kole & Busse, 1969, 1971; DeCharms, 1972; Klugger, 1972; Hobbs & Shelton, 1972; Rawson, 1973; Willman & Chun, 1973; Blackmore, 1974). Two central issues involving the effectiveness of such programs are: 1) control of the learning environment and 2) generalization of the learned behaviors to actual life situations. In some in-patient treatment programs (i.e., token economies), a child's behavior is controlled by external reinforcement of an appropriate performance level; however, data indicates a high recidivism to prior-to-treatment behavior (Truax, 1966). Such programs even though they greatly control the learning environment appear to fall short of achieving internalization of behavioral improvements. Furthermore, although removing a child from his problem environment (i.e., institutionalization) may have the advantage of more control over therapeutic goals, it runs the risk of being a lengthy separation from family and peers which might cause adjustment problems on return to the actual life situation, i.e., hindering generalization of learned behaviors (Clement, 1967; Rose, 1972). Non-residential treatment programs (group clinics, outpatient clinics, social-work agencies) while not suffering from the problems of lengthy separation seem to suffer from lack of control due to an inabliity to maintain a consistent therapeutic program, i.e., cancellation rate is very high (Garfield & Bergen, 1971). To strengthen the

effects of a particular program an effective balance between the two central approaches is essential.

Therapeutic camping programs have been explored and found to be effective treatment modalities (Beker, 1960; Blackmore, et al., 1974; Hobbs & Shelton, 1972; Kaplan, 1974; Kole & Busse, 1969; Linn & Busse, 1971; Rawson, 1973a, 1973b). Such studies indicate that positive change requires stimulating the child's interest and sufficiently controlling a number of elements in his environment. Therapeutic camping programs have long been widely advocated because of their potential for a high degree of environmental control and their appeal to children (McNeil, 1957).

Camping was originally reported by Mitchell (1950) to benefit well-to-do boys so they wouldn't "idle" away. Considered constructive, goal-directed activity (Bettelheim, 1952), it was believed to aid character building and avoid undirected behavior. An example can be found in the objectives of the Boy Scouts' camping programs. Their well-known motto--Be Prepared--expresses the content of their programs. Great effort in developing the Boy Scouts to include task centered recreation is evident (i.e., merit badges). In this way, the Boy Scouts might be considered a therapeutic program. Needless to say, the Boy Scouts continues to be a successful organization. It grew in size 9.4% over the last year in Denver (Annual Report, 1974).

At first, the pattern of camping programs was structured and under the supervision of adult models (McNeil, 1957). Special camp programs were developed for delinquent youths to serve their sentences away from the urban environment. The "fresh-air" programs

survival. Survival training emphasizes stress experiences which push the person beyond his usual performance. Such tasks as mountain climbing, white water river running, living off the land alone for a few days, and demanding search and rescue missions are common. The development of necessary survival skills seems to include the development of intra- and inter-personal skills in group discussions, decision making, relating with instructors, and living under stress. Barcus and Bergesen (1972) feel these wilderness experiences force people to stretch their perceived potentials to broader boundaries.

Outward Bound is the most well known survival training program presently in operation (Colorado Outward Bound School, 1969; Grossman, 1967). It has involved a broad spectrum of people. Their programs usually fill with young men in their teens and early twenties. However, groups have included businessmen, delinquents, college student groups, and groups of professional youth leaders. Outward Bound specifies several goals which seem prevalent across most survival programs: 1) establishment of constructive relationship between participant and instructor (authority figure); 2) learning to work in a group as a unit; and 3) enhancing self-image by both physical and mental survival challenges. Outward Bound uses a variety of experiences in its survival training. Activities begin with physical and psychological warming-up exercises at a base camp often involving learning to make group decisions and to work together on a relatively simple task (i.e., building a fire). From this, they move on to more and more demanding tasks (i.e., technical mountain climbing)

for the poor were a logical extension and provided an opportunity for underprivileged children to experience a change from city life. In the past two decades the nature of camping programs changed from a disciplinary activity to one of psychological self-reliance (Bettleheim, 1952; McNeil, 1957). The development of survival training programs (i.e., Outward Bound) has opened the door for many professionals to utilize the wilderness in therapeutic ventures.

Literature pertinent to outdoor therapeutic intervention programs may be classified into two kinds of programs: 1) survival training programs which primarily aim to teach wilderness survival skills and as a by-product develop person growth and 2) outdoor therapeutic camping programs whose foremost goal is to develop personal growth (i.e., attitudinal change and behavioral change through the medium of the wilderness). In the latter, development of survival skills is an instrument of the program, not the primary concern. Rather, the concern is the individual. Both types of programs are similar in nature, however, their priorities are reversed.

Outdoor Survival Training Programs

Outdoor survival training is frequently viewed as a potential tool for improving interpersonal skills and personal self-concepts (Adams, 1969; Hoag, 1970; Howard, 1970; Wohlwill, 1970; Lieberman, 1971; Willman & Chun, 1973; Kaplan, 1974). These programs emphasize learning to deal with nature both alone and as a member of a group. Survival training presents an individual or group with a natural environment--wilderness--with few artifacts in a struggle for

culminating with a three-day solo survival in the wilderness.

It has been reported by Barcus and Bergeson (1972) that survival training is used as therapy for disturbed adolescents. They report placing patients in survival training to given them a new assessment of their personal resources. As a result of Outward Bound's apparent success many other private organizations have developed similar programs with a variety of purposes.

Several colleges sponsor survival training programs. Brigham Young University places college dropouts who desire reinstatement in survival training programs as a prerequisite for returning to school (Howard, 1970). BYU officials hypothesize that survival training strengthens self-concept and this increased self-concept generalizes to one's feeling about academic ability. The University of Colorado sponsor a mountaineering program that is available to students on a volunteer basis (Bower, Personal Report, 1974). Major emphasis of this program is on physical endurance and stamina rather than survival and no formal evaluation has been performed. Prescott College in Prescott, Arizona uses a rugged survival training program to orient all new students to college life (Prescott College Outdoor Action and Orientation Program Bulletin, 1970). Specifically what the benefits are is very vague. Colorado College has implemented survival training programs for dormitory counselors (Colorado Outward Bound, C-53, 1970).

Maynard (1969) carried out a study in 1966 to determine the effect of Outward Bound on the attitudes of a group of youths from slum areas. It was found that, compared to a control group, the

youths in the Outward Bound program "began to develop those attributes of character which act as a foundation for achievement motivation and for mature social participation." Specifically, he found Outward Bound youths showed significant changes in attitude by seeing themselves as stronger and more active, and generally more positive and less alienated.

A study conducted in 1967 by Maynard (1969) attempted to determine if the Outward Bound experience was effective in keeping juvenile delinquents out of further trouble with authorities. The study showed that a year after the experiment, only 20 percent of the youths had been returned to juvenile or adult institutions. This is about one-half of the usual recidivism rate. Maynard's findings are supported by Kelley and Bear (1968, 1971) and Willman and Chun (1973) who performed similar studies on juvenile offenders in survival programs.

The Outward Bound experience was included as part of a senior seminar at East High School in Denver. The Outward Bound Bulletin 1968 reported that 93 seniors including a group of 25 "target" students, who had college potential but were low achievers, spent the first two weeks of the project on a survival trip in Mexico. They later floated the Yampa and Green Rivers in Colorado. It should be noted that there is no way of separating the effect of survival training in the out-of-doors from the total experience of the program or the volunteer aspect of the selection. However, the target group had a school dropout rate of 2.2 percent, while the senior class at East High School experienced an 11.5 percent. Thus, it appeared that participation in the program was effective.

More sophisticated studies have been performed to get a more accurate assessment of the psychological effects of survival training. Moses and Peterson (1970) compared three approaches to improving grade point averages of low achievers: A = sensitivity training; B = survival training and C = control (no special training). In evaluating the results, the limitations in methodology because of inconsistent sample size (A = 14N, B = 44N, C = 45N) must be considered. The greatest increase in average GPA over one semester reported by the authors occurred in Group A (+.76 points on a 4 point scale); however, group B had an increase of .47 over each of three quarters while the control group only had an increase of .07 over three quarters. The results, then, do suggest survival training to possibly be of value as an aid in the development of better academic performance.

Howard (1970) used the Teenessee Self Concept Scale Counseling Form to assess effects of a 26-day survival training experience on self-concept. Twenty-five subjects were tested immediately before and after the experience and post testing indicated significant change on thirteen of the nineteen scales. Howard reports "on almost every scale the post-testing mean moved closer to the national mean." Furthermore, he stated that "on those scales where it was desirable to be below or above the national mean, the post-test mean had moved toward the desirable position (page 35)." His lack of maintaining a control group jeopardizes the validity of the assumptions. However, subjects did personally report improved self-image in physical, moral-ethical, personal, family and social self-concepts. Self-satisfaction and self-esteem

significantly increased. And, survival training as in previous cases was concluded to be effective in stimulating significant improvements of feelings toward oneself.

Another researcher (Adams, 1969) used the Tennessee Self-Concept Scale and the 16PF test to evaluate the effects of survival training. Seventeen adolescent patients at the Wyoming State Mental Hospital participated in a 30-day survival training program. Subjects were pre- and post-tested. The 16PF test results indicated a significant decline in neuroticism after the survival training experience and trends toward increased ego strength, conscientiousness, acceptance, adaptability, composure, and tranquility were indicated but did not reach a significant level.

Belief in the positive value of survival training is demonstrated by its implementation in many ways. Furthermore, a wide variety of sources exclaim its effectiveness, from college professors (Norin in Prescott College Bulletin, 1973) to countless participants. Their testimonials carry many common themes of personal growth (i.e., increased self-confidence, new awareness of personal capabilities, development of personal physical resources, increased social skills). Drastic changes in self-concepts were indicated by participants in survival training programs. The only negative reactions were usually voiced in regard to physical dangers that are an integral part of survival training experiences. However, participants more commonly come out only fatigued with a minimal weight loss.

In summary, the formal evaluations made of outdoor survival training programs are minimal but the informal evaluations which

were done suggest that such programs produce positive change toward improved personal functioning. Many programs lacked proper methods, designs, definition of variables and controls. But, although these are important factors in isolating cause-effect relationships and are necessary for precision in extrapolating data, some changes in personal functioning were strongly suggested. As a result, survival training type programs were applied to particular problem populations and explored as a therapeutic tool.

Outdoor Therapeutic Camping Programs

Outdoor therapeutic camping programs are different from survival training programs in that they are designed to meet the needs of a particular target population and evaluated in terms of having met certain therapeutic goals. Survival skills are learned as a by-product in the therapeutic program and improved personal functioning is the primary goal.

The formal therapeutic use of camping with a specific problem population was recognized by Blumenthal (1947) when he reported case studies of success with delinquents in camping. The evaluation was very informal but did stress the therapeutic value of camping programs. The benefits of camping were later recognized by McNeil (1957) and he subsequently reported on an outdoor therapeutic program (1962). Again, the form of report was of a personal observation and a case study variety which afforded results of only vague generalities. But, the potential of the wilderness as a therapeutic milieu was beginning to pierce the professional front.

Meyers (1961) wrote a book, Camping for Emotionally Disturbed Boys, on the use of therapeutic camping with disturbed youth. The

text is a cookbook approach of how to set up a program and he described from his own personal observations the benefits of the different programs. Loughmiller (1965) wrote a similar text, Wilderness Road, on a program which attempted to tie more thoroughly wilderness survival goals with a therapeutic model. Even though the evaluation and sample were limited, the program appeared to be a therapeutic mode which was not only effective but also appealing to the pre-adolescent and adolescent participants. The adolescent population had previously been considered difficult to engage in therapy effectively because therapists often met resistance. Glueck (1950) noted problem adolescents as having a need for adventure. The uniqueness of this milieu provided a therapeutic foundation which broke the resistance of the adolescent and engaged him in an effective treatment program.

The first and most basic program in which a more thorough evaluation was implemented was done by Beker (1960). He administered a self-concept check list and the Classroom Social Distance Scale to evaluate both social and emotional growth of 13 school classes of sixth graders participating in a five-day school camping program. Four non-participating classes provided control subjects. Campers using a check list, and adult observers rated the social climate of each encampment. Significant marked positive changes in self-esteem were shown by the campers. The control group did not reflect these changes. The differences were even greater after a lapse of 10 weeks which Baker suggests may be the continuation of growth processes which started at camp.

Behavior modification approaches. Rickard and Dinoff (1965) reported on a therapeutic camping program with youths having emotional and academic problems. This program combined the use of camping and behavior modification for treatment. Their limited sample and design restricted large-scale assumptions. However, several studies sprouted as a result of reported positive trends.

The Mountain Activities Program (MAP, 1972) developed by Jefferson County Mental Health Center was a summer camping program whose therapeutic mode was also behavior modification. MAP used back-packing and camp craft in addition to survival training. The amount of food given to the youths on the pack trips was contingent on their behavior at home between trips. Again, no formal observations were reported, but informal comments indicated a positive change.

The Summer Therapeutic Environment Program (STEP, 1973) was an extension of the efforts of MAP. STEP exposed nine boys with academic and behavioral problems to a similar therapeutic program but also tried to reach more directly the boy's home and school environments. STEP stressed a "home-based reinforcement environment" which maintains the family as the central structure for therapy and the mental health center as a tool. There was no control group to substantiate the significant positive change that was reported between baseline and follow-up measures in behavior change (Louisville Behavior Check List). A positive change though not significant was indicated on the academic measure (Wide Range Achievement).

Rawson (1973a, 1973b) reports on the use of a summer outdoor camp with youths demonstrating below potential academic achievement. He created an academic environment in a camping situation and employed a behavior modification model: certain outdoor activities (e.g., swimming) were reinforcement for academic (i.e., multiplication tables) and camp craft learning. The youths in Rawson's program reported enjoying the experience and all wanted to return even with its heavy academic orientation with which the youths had previously been unsuccessful.

Rawson developed an attitudinal and authoritarian measure to evaluate the youths (i.e., how they felt about the school-type environment) pre and post-treatment. This measure was subjected to a year of pretesting and validation in the public schools. Specifically, the measure explored: response to authority, acquiescence, degree of perceived likability, degree of social retaliation needs, self-rating of academic potential and attitudes toward school in general, toward teachers in general, toward academic activities, as well as attitudes toward ability to derive rewards from the school situation, degree of control over "negative" events, degree of frustration and tolerance, and attitudes toward home. His findings indicated the youths significantly improved on the attitudinal measure and that they scored no higher on the authoritarian measure than the normative group he used to standardize the instrument. This indicated a better attitude toward school and learning, and no change in how they view authority figures, which was a concern because of the behavioral mode of treatment in which the counselors enforced the contingencies. Rawson's design lacked a control group measure but he did standardize

his forms to help control for testing effects. Furthermore, 81% of the parents noted positive change which supported the positive indications on the instruments.

MAP, STEP, and Rawson's programs uniquely apply behavior modification to a camping situation. Their results indicate that such a combination is effective in achieving certain desired results. However, the programs have not been in use long enough to measure long term effects.

Eclectic approaches. Kole and Busse (1969) report on an outdoor therapeutic program for mostly delinquent youths in Portland, Oregon. Two-hundred and fifty youths in groups of 30-40 participated in a one-week camp program. The participants hiked to a base camp where they stayed for the week and were exposed to physically challenging activities. Strict contingencies were not employed as in the behavior modification approach and therapeutic camping was approached in a more eclectic fashion. Group cohesiveness was achieved by placing the youths in groups, having group competitions and group camping responsibilities. Groups were always up against nature too. No formal evaluation of this program was conducted; however, it was reported to be "effective."

Hobbs and Shelton (1972) report on a limited sample case study of nine emotionally disturbed adolescent males in an outdoor therapeutic program. A five-day canoe trip in Alabama was designed as an alternative approach to the traditional 50-minute hour which had met little success. Again, outdoor therapy was reported to be a "valuable tool for outpatient treatment of adolescent boys."

Kaplan (1974) attempted to bring together wilderness survival and treatment of specific target youths. In Marquette, Michigan, nine males between 15-17 years from the Community Mental Health Center participated in a back-packing program in which they were taught wilderness and interpersonal skills. Kaplan maintained a control sample of 25 youths from the same community mental health center. Two types of measures were administered to both groups: 1) camp-craft knowledge and 2) self-concept (Rosenberg Self-Esteem Measure). From these evaluations, it was concluded that the experimental group learned a significant amount of specific camp material across treatment. There was not an immediate significant change on the self-esteem measure. However, there was a significant improvement at the time of follow-up. This was attributed to the time a self-concept change may need to be validated internally. Although Kaplan's study has a limited sample, it exhibited the most elaborate evaluation of the studies examined.

In general, the literature on outdoor therapeutic camping programs indicates positive change with target populations, but lacks design and evaluation sophistication. These problems are common to both survival training programs and outdoor therapeutic camping programs. Such weak evaluations make it difficult to differentiate success and failure. Further program development, more systematic evaluation and finer analysis are essential to tap the potential therapeutic resources the wilderness holds. The Wilderness Experience Program attempts to address some of these concerns. Its history and development follow in the next chapter.

CHAPTER 2

Wilderness Experience Program

History and Development

The Wilderness Experience Program (WEP) was originally organized by Jeffco Action Center to introduce economically deprived children, referred by the Jefferson County Welfare Department, to the "beauties of the wilderness." The Action Center continues to sponsor the program under Jeffco Support, Inc. However, WEP's initial, altruistic, do-gooder philosophy which was consistent with the nature of the Action Center has been modified. WEP currently emphasizes a more structured, goal-oriented therapeutic philosophy.

Initial Summer Program--1971: Two sections of thirty children (8-12 years of age), organized into groups of 7-8 children with two volunteer counselors, participated in a one-week camping trip on Willow Creek Ranch in Shawnee about 60 miles southwest of Denver, Colorado. These youths engaged in activities such as boating, swimming, hiking, rock climbing, fishing, and arts and crafts. These children also experienced pitching tents, lighting fires, cooking outdoors, and first aid techniques in their general exposure to the wilderness.

Although this camping experience appeared to provide great fun and excitement for the children, feedback from the youths, the staff and the director indicated that they desired a directional change from a purely recreational program to a more specific task-oriented, recreation program. Through informal discussion with the staff, the following questions regarding the program's future were addressed: 1) purpose and goals of the program, 2) direction of the program,

3) achievement of the program's intentions, and 4) type of participants. As a result of discussing these concerns, there was a tremendous desire to develop a component which maintained specific program goals and tasks which would augment the personal growth of the participants. As a possible means of implementing this dimension, a one-week "experimental" backpacking trip was included in 1972. Otherwise, no specific program changes were made at that time pending further exploration and development of the therapeutic as well as recreational philosophy.

Second Summer Program--1972: In the summer of 1972 WEP was expanded to include 145 children (8-15 years of age) from several Denver-metro agencies. WEP now included children defined as having inter- and/or intra-personal adjustment problems as well as economically deprived children with no definable adjustment problem. Four sections of approximately 30 children (plus two counselors again for every 7-8 children) participated in a camping program similar to that of 1971. Again, Willow Creek Ranch was the location for the one-week camp sessions. Twenty children and six counselors took part in the "experimental" backpacking component. The backpacking section was also located near the Willow Creek Ranch in the Kenosha mountains.

The experimental backpacking trip was a testing ground for the anticipated future direction of WEP. It was indicated by the campers and staff that the program needed a more task-oriented aspect in which the children could apply their newly acquired camping skills to gain a sense of accomplishment. The backpacking trip included an intensive one and a half day training session

followed by a four day pack trip. Training included learning camping skills (as in the 1971 camp program) as well as reading of topographic maps, use of compasses, packing back packs, setting up camp sites, general backpacking, mountaineering techniques, and preserving the wilderness. The youths were taught a complete spectrum of skills to be used later on the trail.

The program went through an extensive internal evaluation. The campers and counselors gave feedback to the director on the direction they felt WEP should proceed to best facilitate a goal of personal growth for the youths. The counselors, some of whom participated in both the camp setting and backpacking, indicated that more structure was needed to give them an understanding of what avenues to use to reach the desired goals. By making most activities task-oriented the campers and counselors got the much-desired structure. The staff felt that they could work more effectively on the trail in smaller groups (6-8) to ease distractions. This would initially give the counselors more control over the youth which they felt they needed in order to subsequently give control over to the youths. The counselors expressed that to put the youth in control of his behavior the youth must first believe the adult or group has control.

The campers verbally indicated they were pleased with the program. Some of the campers who had participated in the 1971 program and the 1972 backpacking experience indicated they liked the backpacking trip better. They enjoyed not only having the feeling of adventure but also they emphasized that in doing something new they also learned something new.

The avenues to WEP goals became more definitive and structured: 1) goal-directed behavior development--learning wilderness skills, and 2) application of skills to a more specific task--applying wilderness skills to backpacking expedition. Furthermore, specific therapeutic goals of the program were outlined: to develop overall emancipated youths by helping them accept responsibility for their own behavior (i.e., by developing attitudes of self-reliance and self-confidence) and to gain the mutual trust and respect of and for peers. The acquisition of wilderness skills and the applied backpacking experience were considered effective outdoor activities to help achieve these personal growth goals. Thus, the summer 1972 program served as a transitional year in which the original, diffuse, altruistic philosophy of WEP became more specifically defined by combining a fun and exciting, recreational camping experience with the achievement of certain therapeutic goals. These therapeutic goals, then, became a part of staff training.

Logic of Therapeutic Approach and WEP Goals

Several possibilities for achieving the above therapeutic goals were entertained. First, a complete behavior modification program was proposed. However, after considerable thought, it was decided inappropriate for the following reasons: 1) behavior modification implies an individual program for each youth and this would be too difficult to implement with so many children and 2) the overall goal of developing an emancipated youth would be difficult to maintain because adults would be required to employ contingencies. Individual contracting was also considered in light of the benefit it has with behavior modification (i.e., self-regulation literature) and other

treatment modalities: Children could implement their own contingencies. However, the youths of WEP were felt to be too confused about their problem to benefit from implementing this technique or its combination. Most youths also lacked the motivation to tackle their personal problems as they hadn't come with this in mind.

A more humanistic, eclectic approach was finally drafted. The program employs aspects of modeling (Bandura, 1969), personal causation (DeCharms, 1972), transactional analysis (Berne, 1971), and assertive training (Alberti & Emmons, 1974). It was believed that one approach would not accomodate the diversified youth and individual staff members. And, as a result, the ultimate direction and the foundation for the program incorporated many elements from these therapeutic approaches to attack WEP goals. The use of more than one dimension for diagnosing and assessing the psychological make-up of the youths as well as a variety of treatment approaches are important alternatives in order to find an approach that works well with the youths and with which the counselors are both comfortable and effective (see Chart 1).

Transactional Analysis (TA, Berne, 1971) is used because it provides a conceptualization of how people function and is an effective and easily understood treatment approach. TA serves as the common language in the program for approaching and understanding the individual youths. The individual is described as having three basic parts or persons within himself and these are labeled "ego-states." They are the parent, the adult and the child. The parent ego state feels and behaves in the same ways one's mother or father or whoever

Chart 1

WEP's Eclectic Approach

TA Ego States	Modeling	DeCharms	Assertive
Parent	Do as I say-- Not as I do.	Origin: always acting upon (Defense)	Aggressive Behavior
Adult	Parallel modeling interaction (model appropriate behavior)	Rolling with appropriate punches (sometimes origin & sometimes pawn)	Assertive Behavior
Child	Tell me what to do.	Pawn: always being acted upon	Non-assertive Behavior

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raised one did. The parent can be critical and/or helping. The adult ego state is the "computer," the part that uses facts to make decisions. The child ego state has the same feelings and ways of behaving one had when one was very little. The child can be "natural"--that is, act on his own, not under the influence of his internal parent or be "adopted"--that is, pleasing the internal parent. Each of the three ego-states produces distinct, characteristic ways of behaving and feeling. It is important for an individual to be in touch with all three states.

The states often disagree with each other and one part wants one thing and another part wants another. The purpose of TA is to get all parts working together. The ego states are like voices. The parent says things like "you must," "you should," "you should not," or "don't" plus slogans like "if you want something done right, do it yourself." The child iterates "I want what I want when I want it" or "Try and make me." The adult prefers to operate on facts, not feelings. He communicates "Here is how this works." It is important to know and accept that it is healthy to hear all parts--all the ego-states--which make up one's personality.

The transaction in the TA model is also important to the therapeutic development of the program. It helps to understand how people interact, verbally or behaviorally, among one another. It can be an exchange of friendly words, angry blows, presents, or bullets. When one says "hello" to someone, and he says "hello" back, the exchange is called a transaction in TA terms (Berne, 1971). The parent, adult or child in the one person will be answering the parent, adult or child in the other person. The exchanges can be

adult to adult, adult to child, adult to parent, parent to parent, parent to adult and so on. The important factor in relation to the program is that the transaction can be controlled by the type of interaction. The counselors are trained to develop transactions which cause the youths to operate in the adult ego state. This is accomplished by feeding only information to the youths, teaching problem solving and demanding self-evaluation. This transaction takes the counselor out of the parent role and causes an adult to adult interaction.

The TA model uniquely fits with the program's goals in that the program recruits youths that have difficulty functioning in the adult ego state. The youth may function in a parent or child ego state but needs assistance in making the transition to adult ego state. The goals of the program: 1) to get a youth to accept responsibility for his/her behavior and 2) to develop trust in his/her peers are essential to achieving the adult ego state.

Ego-states, strokes, life-scripts and decisions are stressed in the TA model and are important to WEP's therapeutic model. All people need strokes. A stroke is a pat on the back, or a word of recognition. A kick on the shins is also a stroke. Everyone needs to get and to give stroking, pleasant or unpleasant (i.e., a child would rather be spanked than be totally ignored, Berne, 1972). There are both positive (loving) and negative (hating) strokes. A conditional stroke is given for what one does rather than for what one is. For example, a father who says, "I like you when you do as you are told" is giving a conditional stroke in that he expects something in return. An unconditional stroke is given for

what the child is rather than for what he can do. For example, there are no strings attached when father says, "I love you because you are you." Understanding strokes is essential: WEP staff members develop an ability to have uniformity in giving strokes and an ability to assess what kind of stroke a child needs.

The kind of strokes that are given and received depends on how the child in the person feels about himself and others. How one feels about himself and others is called a basic position in TA and there are four positions as stated by Berne (1971):

1) I am ok. You're ok. (This is the healthy position.)

2) I am ok. You're not ok. (This is the position of a child who distrusts others.)

3) I'm not ok. You're ok. (This is the position of the child who usually feels unworthy or depressed.)

4) I'm not ok. You're not ok. (This is the position of a child who feels he can't sin, that life just isn't worth it.)

Most of the youth comprising the WEP sample fall into positions 2) and 3) with a small number falling into 1) and 4). If the child ego state feels not-ok., the person probably will learn to settle for more negative than positive strokes. He may turn down positive strokes feeling he doesn't deserve them. He may even go out of his way to receive negative strokes. Although a person wants compliments, he may feel uncomfortable getting them. When such a person receives one he may think the person is just being polite or wants something (Berne, 1970, 1972). This idea expressed by Berne fits very appropriately with Marecek and Mettee's (1972) contention that successful outcomes which don't coincide with how a person feels about himself will make the individual uncomfortable enough to

contaminate the outcomes so that they meet his lower expectations, thus making him comfortable.

In TA terms another important aspect of one's life is his script. Everyone has a life script. It is a life plan which the child ego state decided upon in the early years as a result of the parent messages. The script is either healthy or unhealthy depending on the basic position. Understanding strokes and life scripts are crucial in dealing with youths because the development of the child ego state is paramount to building a sound level of ego balance.

The decisions concept in TA says the choice is that of the individual. The individual youth may believe he can't be close to anyone because he might get burned. However, since this is a decision on the part of the youth he really is saying "I won't" not "I can't." The deicisions concept is used to change the life script, which is a decision on the part of the youth, one step at a time until he has developed a healthy life script in which he can receive positive strokes for being himself. A youth with the guidance of a counselor can made a decision to make an individual contract. This becomes an integral aspect of WEP's therapeutic philosophy. The contingencies must be made by the individual for himself. The decision to change rests solely on the shoulders of the individual. This forces the youth into the adult ego state where he is taking in information, processing it and making his own decisions.

The transition into the adult ego state allows a youth to gain control over all his ego states and gives him the tools to achieve

an emancipated state. Consequently, the youth will be in better control of his behavior and more able to trust his peers. DeCharms' (1971) theory of personal causation also stresses the importance of one's ability to function in the appropriate ego-state at the appropriate time. In DeCharms' terminology on the control of one's destiny, of critical importance is an awareness of when one is acting or being acted upon, "origins" and "pawns," respectively. He feels individuals should be aware of which role to assume in particular siuations. One may not always have the choice as to what role he will assume; however, as in the TA model, one should know what role or ego state one is in. DeCharms' (1971) theory of personal causation is a very practical approach to understanding how individuals fit in their environment. As in the TA model, he proposes the responsibility rests with the individual to take control of his actions (i.e., TA adult-ego state). Both TA and DeCharms stress that knowledge and awareness of available responses in a given situation are important in order to have the skills to make the choice of how one wants to respond.

Bandura's modeling approach is important during the initial stages of the program when the counselor is assuming the teacher/parent role. At this time the counselor is supplying the youth with appropriate forms of interpersonal interaction. The youth builds up his resources for appropriate behavior with this exposure. Techniques common to TA are used as therapeutic means of achieving these goals; namely, training the counselors to at first assume the parent ego state of interaction with a gradual shift to interaction considered primarily as another member of

the group, a supportive colleague (adult ego state).

The staff is also trained to understand assertive, passive and aggressive type behaviors. This is not only important to teach the youths but also useful as a tool for the counselors. The aggressive person carries self-assertion to the extreme and his behavior usually accomplishes immediate ends at the expense of others. Although the aggressive person usually finds his behavior self-enhancing, it is destructive as it hurts others (i.e., makes choices for others and minimizes their self-worth). Alberti and Emmons (1974) model of assertive behaviors fits well with the TA model's adult ego state, whereas aggressive and non-assertive behaviors fall more with the parent and child ego states, respectively.

It is believed by Alberti and Emmons (1974) that each person should be able to choose for himself how he will act in a given situation. If his "polite restraint" (non-assertive) approach to situations is the major tool in his style, he may be unable to make the choice to act as he would like to. If his aggressive response is over developed, he may be unable to achieve his own goals without hurting others. Freedom of choice and exercise of self-control, made possible by the development of assertive responses in situations which have previously produced anxiety, are paramount to the philosophy of WEP.

Examples contrasting assertive with non-assertive and aggressive actions help to clarify these concepts (see Chart 2, Alberti & Emmons, 1974). The chart demonstrates in each of the examples which feelings and consequences are typical for the person (actor)

Chart 2[1]

Assertive and Aggressive Behavior

Non-assertive	Aggressive	Assertive
As Actor-	As Actor-	As Actor-
Self-denying	Self-enhancing at expense of another	Self-enhancing
Inhibited	Expressive	Expressive
Hurt, anxious	Depreciates others	Feels good about self
Allows others to choose for him	Chooses for others	Chooses for self
Does not achieve desired goal	Achieves desired goal by hurting others	May achieve desired goal
As Acted Upon-	As Acted Upon-	As Acted Upon-
Guilty or angry	Self-denying	Self-enhancing
Depreciates actor	Hurt, defensive, humiliated	Expressive
Achieves desired goal at actor's expense	Does not achieve desired goal	May achieve desired goal

[1] Alberti and Emmons (1970), page 11.

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whose behavior is non-assertive, assertive or aggressive. Also shown, for each of these modes of behavior, are the likely consequences for the person toward whom the action is directed (acted upon). As indicated by the chart, one concludes that the actor is hurt by self-denial in non-assertive behavior and the person acted upon is more likely hurt in aggressive behavior, which in the long run also handicaps the actor. In assertive behavior neither person is hurt, and unless their goal achievement is mutually exclusive, both are winners, and just as importantly there are no losers.

Last, but not least, the wilderness environment must be considered as a contributing factor in the therapeutic milieu of WEP. In most cases the youths have had little or no experience in the wilderness and this novelty may facilitate the implementation of these therapeutic techniques (Rawson, 1973). A new set of skills to maintain ordinary personal comforts, such as keeping dry, warm, fed, etc. demand new problem solving techniques and facilitate the implementation of the therapeutic techniques, which remain critical for appropriate personal growth. Moreover, the environmental feedback for appropriate or inappropriate solutions can not be denied, i.e., if a child gets wet from rain, he may get cold too! Although the counselors try to maintain resource-person roles, the youths have tactics for manipulating them in some instances. But, mother nature can never be fooled. Thus, the wilderness environment serves as a personal challenge on line with constant feedback and self-evaluation.

An evaluation of the youths indicated similar physical capabilities for hiking, camping, backpacking, etc. The demographic make-up of the group showed a large variation in background and yet, a similar problem identification as noted by referring agencies. It was apparent that the youths had more difficulty than most in approaching barriers (problems) appropriately in their lives and negotiating them successfully. Thus, WEP hoped to make available an environment--the wilderness--in which the tools to negotiate the barriers appropriately could be developed.

The specific program goals are: 1) to help youths develop responsibility for their own behavior, and 2) to help youths develop trust in their peers. Program goal #1 is important because these youths feel helpless about changing their lifestyles. Seligman (1967, 1968) believes the individual perpetuates this syndrome by avoiding confrontation with his problem, and letting authority figures assume responsibility for his behavior. WEP attempts by the development of the adult ego state to upset the youth's system of relying on authority figures to solve his problems. By having the youth assume responsibility, the adult figures no longer remain in evaluative positions. The youth is then forced to expend his energy in making his own decisions and evaluations. The rightness or wrongness of the decision is many times indicated by the consequences of nature. Thus, the program requires the authority figures (counselors) to assume the role of a resource person, constantly giving information, but supplying little personal judgment or evaluation (adult ego state).

In this way, self-evaluation is encouraged as well as demanded and never condemned.

Program goal #2 is an extension of goal #1 and places importance on resolving the youths' inability to trust and relate to peers. With no overriding adult opinions, the youths begin to seek peer evaluation and personal control, i.e., finding the group's behavioral parameters for oneself. This is a new experience for problem youths as in the past they may have been responsible for controlling each other's behavior only in deviant situations (i.e., street gangs). The youths appear to have little trust, in themselves or for others (peers) and believe adults to have ultimate responsibility; however, the youths do not personally trust them. When encouraged or required to depend on peers for personal comfort and safety, more appropriate peer socialization develops (Sherif & Sherif, 1969).

Designed to give better skills for coping with problems, WEP, in general, presents the problem of learning to live in the wilderness, e.g., cooking meals, where and when to camp. The important aspect is that the youth learns an approach to solving problems (process), not necessarily a specific skill (content). For example, a youth is given the problem of cooking a meal; how he cooks it is unimportant (content), but approaching and solving it (process) is important. As a result the youth develops a method which enables acceptance of personal responsibility. To capture the essence of these new abilities, the campers engage in an overnight trek--group solo--from a designated point A to a designated point B for two days without counselors (counselors are ½ mile behind for

emergencies). This solo model developed from Outward Bound's reported successful "individual solo" which consisted of a 3-day live-off-the-land final test. Outward Bound indicated that this experience was beneficial for two main reasons: it tested outdoor survival skills (a primary goal of their program) and 2) it facilitated introspection. Outward Bound's population is 16 and up, chronologically older than WEP youths, and most of the participants have experienced normal development. For these reasons, a modified "group solo" was developed for WEP in an effort to tap skill development but primarily inter-dependence among peers as well as self trust.

As stated earlier, the wilderness serves as a novel situation for most of the problem youths of WEP. This may facilitate an atmosphere where positive behavioral improvement can be taught (Rawson, 1973) in children who characteristically have great therapeutic resistance (i.e., because of previous therapeutic attempts the youth has developed guarded and protected coping mechanisms). The novelty of the new experience in the wilderness is hypothesized to help breakdown the child's previous unhealthy attitudes about himself. The new environment provides an effective opportunity for change because the youth has nothing in his new environment to identify with his old problems. Typically, a child performing poorly in school is removed to a special classroom where success situations are manufactured; however, because there are so many similar elements to the normal classroom, the child identifies with his previous attitude of failing in the classroom. He contaminates the success environment of the new classroom to

conform with his own well-established expectations. Thus, his self-concept and performance do not improve (Mettee, 1971, 1974). Wilderness training requires the acquisition of specific skills in adapting to a new environment unencumbered by prior negative expectations. For example, the camp meal preparation requires group work and peer help with a new set of skills and expectations (i.e., group coordination). Furthermore, in the wilderness the poorly adjusted child's strong need for adventure (Glueck, 1950) is capitalized upon. The wilderness provides an environment in which the program can teach the youths new problem-solving and coping techniques and avoid having the youths fall back on old maladaptive behaviors.

While differing in style, this program is similar to Rawson's (1973a, 1973b) in that a more positive self-attitude is created through exposure to a novel situation. Rawson employed an event-building-block concept of successes using a "prescription" of behavior modification. His goals are specifically educational as well as social. Many programs used a success model which states that if a child experiences success then he will develop a more positive self-concept. This, in turn, will result in a more positive attitude toward one's ability to perform and finally affect one's performance.

However, a series of successes alone may not be enough to change a child's attitude. Substantial success might cause the development of a "rejection of success" syndrome as described by Mettee (1974). Marecek and Mettee (1972) found that people with low self-esteem are uncomfortable with success because they have

limited experience with it. In fact, when placed in a success paradigm in which success was self-produced, the participants contaminated their performance by scheming to be unsuccessful, with which they were familiar.

The youths of WEP often possess low self-esteem (WEP, 1973). It is believed that these youths have little or no prior expectancies about success or failure in the wilderness because they have had no previous wilderness experiences. This absence of prior expectations was hypothesized to circumvent the problem of rejection of success for such low esteem youths. The youths have no anchors for success and/or failure in the novel environment. The program replaced a purely success situation by offering the youth the tools to deal with the new environment. Experimenting with these tools gives him the ability to confront his environment in the appropriate manner and develop a feeling of control. The decision making responsibilities remain with the youth and the freedom to use self-evaluation develops.

The aim of WEP was to give the youths freedom to develop new approaches to problem solving. It did not attempt to mount a frontal attack on old behaviors but rather to subtly develop supplementary styles of coping which may eventually change old ones. To further avoid activating old expectancies, the program did not deal with adult evaluation of specific behavioral successes or failures (micro level). Attitude change was approached on a macro level by gradually enabling the youth to assume the same role as the counselor (mediating interaction). This was accomplished by the development of responsibility and trust through group inter-

action.

In summary, WEP was interested in developing an "emancipated" youth--one who feels independent and capable of assuming responsibility for his behavior--by giving him responsibility and authority in return for his constructive actions. In this way, the youth could develop realistic self-expectancies. This was opposed to authoritatively placing ultimatums and expectancies on the youth. The result was peer group participation in problem solving in the novel environment with the consequent development of self-reliance and peer trust based on individual and group success in coping with the demands of the wilderness.

CHAPTER 3

WEP 1973

In response to the apparent success of the 1972 "experimental" backpacking trip, this was implemented more fully in the summer 1973 program. One hundred twenty-four children (8-15 years of age) participated in two six-day pack trips with a one-week break at home. The entire camping program lasted from July 15 to August 15 with children involved in alternate weeks. This time span usually afforded the best weather conditions and the most efficient logistics. Willow Creek Ranch was generously donated again for use as the base camp.

The structure of the program was an expansion of the 1972 "experimental" backpacking program. Two days were spent in training and four days were spent on the trail during the first six day period. The second week the campers returned home during which time the counselors contacted the parents and the involved agencies (i.e., schools) to gain more understanding of their campers' problems (as well as treatment, if any). This intervention permitted a better understanding of the areas of concern the referring agency held for the child and made sure that these concerns were consistent with WEP's staff analysis. If they were incongruent, the referring agency was consulted immediately. The youths returned to the mountains for the final six-day pack trip. This final backpacking trip completed the three week program. A detailed outline of the 1973 program is in Appendix A.

Method

Staff

The all-volunteer staff consisted of two senior adult counselors (21 and up, one male and one female) and one junior counselor (16-21 years of age) for every 6-8 campers. Being closer in age to the children, the junior counselor often was the key to facilitating interaction and bridging the resistance gap. Implementation of this family model provided more workable units and exposed these children, often from broken or one-parent families, to a surrogate of a typical family model.

The initial selection process for the staff was based primarily on the applicant's motivation, experience and ability to handle responsibility. An exceptionally eager individual, who desired to work with children, characterized the program's definition of applicant motivation and warranted consideration as a counselor. The ability to handle responsibility was rated by past experience and by the reference contacts of the applicant. This was considered very important because the counselors assumed responsibility for the physical well-being of the youths as well as for implementing the therapeutic model. The level of psychological knowledge was not considered as important as the motivation of the individual. The training program aims to give an individual the necessary skills to obtain the desired interaction with these youths. No problems in finding volunteers have been experienced. Final counselor decisions were made by the director acknowledging the staff input.

Training

Counselors were instructed in the logic and logistics of the program as well as in dealing with the physical and emotional problems which could occur. After an initial introductory meeting outlining the purpose and goals of the program, all members went through eight hours of Red Cross first aid training. An additional sixteen hours of program training were spent in discussing the therapeutic model and techniques to achieve the goals of developing an "emancipated" youth (including role playing situations). Detailed description of the typical characteristics of the WEP youths were given to the staff in order to help them understand the type of youth which comprised WEP and what types of behaviors to expect of them. Finally, a wilderness training meeting was held to discuss potential dangers and make final suggestions.

Subjects

The subjects were children referred by metropolitan Denver social agencies for adjustment problems. These youths' problems are diverse (e.g., anti-social behavior, educational problems, peer socialization problems). Typically, the youth has the intellectual ability to perform satisfactorily in school as well as the capability of performing appropriate social behavior. The program's target child is that child in which there is a discrepancy present between ability and performance, either socially and/or cognitively.

The subject sample consisted of 124 youths (94 boys and 30 girls) between the ages of 8 and 15 referred by six agencies.

Balancing the number of boys and girls was not employed. All children paid a $10 fee to participate except in special circumstances in which the fee was adjusted. No youths were forced to participate; however, some were encouraged. Refer to Table 1 for a breakdown of the subject population.

Instruments

WEP advocates that it teaches a youth 1) to be responsible for his own behavior and 2) to trust and work with his peers. It was hypothesized that the attainment of these goals would be reflected in an increase in personal self-esteem and more appropriate behavior. Two paper and pencil tests were selected to evaluate the 1973 summer WEP: 1) a self-report, self-esteem inventory and 2) a behavioral rating form, both developed and standardized by Coopersmith (1967, Appendix B and C). The self-esteem instrument had a correlation coefficient of .80 between measures over a five week test and retest period. The behavioral rating form had a correlation of .96 across teacher raters. Coopersmith also reported the self-esteem inventory had a minimal change ($F = .80$, $p < .50$) of perceived self-esteem across time with no-treatment youths of 9-15 years of age. This inventory was read aloud to WEP youths by a staff member to account for variability in reading. Youths were instructed to follow along with the person reading the instrument, but no comment was made if they went ahead individually. This allowed the youths who could read to progress at their own pace, and those who could not read were observed to make sure they stayed with the reader. All pre, post, and follow-up measures were filled out in a group setting at Jeffco Action Center.

Table 1

1973 WEP Subject Population

Sex and Referring Agency:	Males	Females	Total
Metro Area Welfare Children	33	21	54
Jeffco Mental Health	28	4	32
DU Child Study Clinic	13	4	17
Probation Courts (Denver & Jeff.)	19	1	20
Health Dept. (Welfare Nurse)	1	0	1
TOTAL	94	30	124

Ethnic:	Program	Denver County
Black	9.6% (12)	10%
Chicano	13.7% (17)	26%
White	74.1% (92)	61%
Other	2.4% (3)	3%

Problem Identification:	Percentage
Court--	42%
Aggressive Crimes	68%
Passive	32%
Apparent Drug Related	28%
School	52%
Learning Problem	18%
Social or Behavior Problem	34%
Family (unmanageable or runaway)	14%
Emotional	28%
No Identified Problem (high incidence areas: single family, welfare family, foster home)	18%
Identified Problem (high incidence areas)	82%

Note.--Percentages may exceed 100% because some children fit into more than one category

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The behavior rating forms were completed by the referral agency of an applicant who was accepted into the program. At the termination of the program, this was mailed to the referring agency once again to be filled out. "Reminder" phone calls were placed to those agencies who were delinquent in returning their forms. Counselors were also requested to fill out the behavior rating form on their youths at the end of the program. It was understood that the referring agency and counselor for a particular youth would not be blind to his reasons for participating in the program, but were asked to be as objective as possible.

Design

The WEP design was a pre-experimental, one-group pretest-posttest design (Campbell & Stanley, 1963) which tested the subjects at three intervals with two instruments: Coopersmith's Behavior Rating Form and Coopersmith's Self-Esteem Inventory. The weaknesses of the design should be considered in evaluating the results. The design does not control for change--factors which may have occurred as a result of normal maturation, testing effects, life history changes in the youth and/or regression characteristics of the instrument. The instruments were given pre, post, and follow-up to treatment. The post measure was administered one-week post treatment to control for the excitement the youth has upon completion of the program, and to allow the referring agencies to observe the child. The follow-up measure was taken approximately six weeks following treatment. There was some lag which resulted from difficulty in tracking down clients and from the administrative red-tape of referring agencies.

Scales

The Coopersmith (1967) scales demonstrated moderate levels of independence, all indicating an inter-correlation of below .20, and are listed below:

1) General Self--how one looks at oneself, i.e., personal appearance

2) Social Self, Peers--how one perceives he gets along with his peers

3) School-Academic--how one perceives he performs in school

4) Home-Parent--how one perceives he behaves at home and with his parents

5) Lie Scale--response credibility in filling out form by extremes (never, always)

Results

Table 2 presents the mean difference across pre, post, and follow-up testing intervals. These mean differences are based on a range of 0-2 and are scored in accordance with Coopersmith (1967, page 12). For example, a change across testing intervals of .81 indicates a change of 40% of the total on scale range. A one-way analysis of variance was computed across pre, post, and follow-up intervals to explore the effect at each point. It should be noted that a significant effect across time was found: No comparison group (control) was available to relate the variance to main effects other than time or interaction effects.

In addition to the Coopersmith scales, these data were factor analyzed and the factors indicated two strong factors from the self-esteem data. The factors correspond to the first two Coopersmith scales; however, they contained several more items but seem to support the General Self and Social Self, Peers dimensions.

Table 2

Means, Mean Differences and Significance Levels

for F-Ratios on Coopersmith Scales

	Item Means			SL & Mean Change at Testings					
	Pre	Post	Follow-up	Pre/Post	SL	Post/Follow-up	SL	Pre/Follow-up	SL
Coopersmith Scales									
General Self	.80	1.06	1.61	.36	.05	.45	.01	.81	.01
Social Self, Peers	.74	1.11	1.50	.37	.05	.39	.05	.76	.05
School-Academic	.95	1.26	1.60	.31	.10	.34	.10	.65	.10
Home-Parents	.89	1.17	1.30	.28	--	.23	.10	.51	--
Lie Scale	.40	.36	.37	-.04	--	.01	--	-.03	--
Factor Clusters									
Social Self, Peers	.85	1.23	1.65	.38	.05	.42	.05	.80	.05
General Self	.92	1.25	1.64	.33	.10	.39	.05	.72	.05

Note.-- SL = Significance Level

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These emerged as strong factors in the evaluation of the program. The two factors demonstrated high levels of independence, with a correlation coefficient of .15. As indicated in Table 2, the change across intervals was significant.

Due to the lack of an experimental control group, these results indicate only changes in the measures and no conclusive statements can be made as to the effects of the Wilderness Experience Program versus other possible sources of change, i.e., testing effect. However, it should be noted that Coopersmith's (1967, page 10) normative data indicated non-significant ($F = .80$, $p < .50$) change over three months in normal, non-intervention youths between 9-15 years of age. Although the present design lacked a control, Coopersmith's normative data helps substantiate these findings as being at least partially due to the program.

The results on the Self-Esteem Inventory indicated an overall perceived positive change. The percentages which compare the pre-treatment/post-treatment and pre-treatment/follow-up treatment measures are: 1) a positive trend on the pre/post measure with 66% of the participants showing higher perceived self-esteem, 8% showing no change, and 26% showing negative change; 2) a positive trend on the post/follow-up measure with 81% of the participants showing higher perceived self-esteem, 6% showing no change and 13% showing negative change.

Table 3 compares the composite scores on the Self-Esteem Inventory with Coopersmith's reported mean score of 71.5 on the composite which was developed on 9-15 year old youths across testing intervals. Table 3 indicates that the WEP population

Table 3

Self-Esteem Composite Scores

and Significance Level of F-Ratios

	WEP's					*Coopersmith's			
	Mn	SD	Diff	SL	N	Mn	SD	Diff	SL
Pre-Program	61.62	13.8	--	--	124	71.5	13.6	9.88	.05
Post Program	66.27	14.1	4.65	.10	124	71.5	13.6	5.23	.10
Follow-up	71.45	14.6	9.88	.05	124	71.5	13.6	.05	--

* Coopersmith's (1967) standardized mean (page 13).

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self-esteem was significantly lower than Coopersmith's "normal" population ($p < .05$) as indicated by a statistical test for change. The WEP treatment group scored significantly lower than Coopersmith's (1967) norm until the final follow-up measure at which time both scores were similar, 71.45 WEP ($\bar{M} = 1.429$) and 71.5 Coopersmith ($\bar{M} = 1.43$).

The results on the Coopersmith (1967) Behavior Rating Form indicated that the youths were performing more appropriately at the completion of the program than at the outset. The behaviors are divided into two scales: Esteem and Defensive. These were developed and labeled by Coopersmith (1967); it should be noted that factor evaluation indicated the same scales. In the present sample correlation coefficient between scales was .17 indicating a relatively high degree of independence. Table 4 indicates the difference of the means of the items comprising the scales across pre, post and follow-up time intervals. The range is 4 points on a scale of 1-5. The F-ratios are also indicated in Table 4.

The Esteem scale of the Behavior Rating Form which measures how a youth behaves in the school environment indicated positive mean score changes across time intervals of .55 pre/post testing, .65 post/follow-up testing and 1.20 pre/follow-up testing, which was significant. The Defensive scale which measures how a youth reacts in a social structure did not indicate significant results. The results indicated the youths appear to improve their esteem-type behavior to a greater degree than they lower their defensive behavior. The scores demonstrated continued improvement across time intervals with a greater change between post/follow-up

Table 4

Means, Mean Differences and Significance Levels

for F-Ratios on Behavior Rating Form

	Means			SL & Mean Change at Testings					
	Pre	Post	Follow-up	Pre/Post	SL	Post/Follow-up	SL	Pre/Follow-up	SL
Behaviors:									
Esteem	2.54	3.09	3.74	.55	.10	.65	.10	1.20	.05
Defensive	3.28	2.76	2.32	-.52	--	-.44	--	-.96	.10

Note.-- N = 124

SL = Significance Level

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testing.

The Behavior Rating Form results were that 61% of the children showed improvement post-treatment, 23% showed no marked change, and 16% showed a decline in score on the composite of the measure. The follow-up trend indicated a 78% improvement rate, 7% no change, and 15% showing a decline in score. The greatest amount of change was indicated among the youths with peer socialization adjustment problems and/or school problems. The youths with severe anti-social behaviors, usually categorized as delinquent-type behaviors, showed the least amount of change.

It also appeared that another indicator of positive change was the number of contacts which were made by the referring agency or the WEP staff following the experience. A contact is defined as a supportive meeting with the youth concerning either the accomplishments the youth made at camp or concerning problems he was having around the original referral. Ninety-four percent of the youths who were contacted twice or more showed improvement whereas 74% of those contacted less than twice showed improvement. This 20% difference points out the possible value of supportive contacts. A couple of questions need addressing: what, specifically, is the importance of the individual follow-up and will the two groups (support and non-support) show significant difference after a year follow-up.

Discussion

In the follow-up interview many parents and agencies contributed comments on the program as well as comments on the change in the behavior of the individual child. Seventy-eight percent of

the legal guardians were contacted. Of that percentage, 82% gave verbal report that they observed positive change in the behavior of the youths. The nature of the comments made were: assertive behavior, taking more responsibility, generally happier, and very proud to have completed the task. Eight percent of the parents reported that the improvement dissipated after a couple of weeks which indicated a need for more intensive contact and support of the families during the visitation week and follow-up to maintain the development of the new approaches to problem solving. The unstructured interview approach is suspect because of the testimonial nature of such reports and the desire for the participants to say it is worthwhile so it will be continued (or to avoid hurting your feelings). Also, parents are not always objective evaluators of their children's behavior. But, these reports should be considered supplementary support for the indicated positive statistical results. It will be necessary to entertain the importance of follow-up in future WEP programs. The long-term follow-up measures are not only important to test individual contact effect but also to test internalization.

Most of the participants of the Wilderness Experience Program demonstrated a positive change on both a self-esteem inventory and a behavior rating form. The participants made apparent strides forward in appropriate behavior development, as indicated by the measures and through personal interview. However, without an appropriate control, this can not be conclusively substantiated.

The composite scores on the self-esteem inventory across subjects indicated that the WEP sample of youths was significantly

lower than the standardization Coopersmith (1967, page 13) gives for 9-15 year old normal youths. This indicates that initially the present sample youths scored significantly lower in self-report, self-esteem measures than the normative sample. However, WEP's sample of youth improved to Coopersmith's standard level by the end of the program. The increase in number of improved subjects and the continued positive change in score on the follow-up measure suggest that the changes were internalized. This merits further exploration. The data indicated that the program caused significant positive change in specific self-esteem areas and behaviors of the youths (see Tables 3 and 4) and less change in other areas, showing that results were not due simply to a general testing effect or response tendency.

The design problems noted by Campbell and Stanley (1963) should not be overlooked. The problem of regression to the mean requires special consideration because WEP youths were significantly lower than Coopersmith's (1967) norm (61.62 vs. Coopersmith's 71.5) and at the time of completion WEP youths were at Coopersmith's norm (71.45 vs. Coopersmith's 71.5, Table 3). The use of a control group of a comparable sample would help to highlight whether or not the change is a regression effect or a treatment effect. This would also control for history and maturation effects. The program can not have complete control over the youths' experiences, but greater accuracy can be achieved through the addition of a control group.

Further research should be carried out to substantiate the positive implication in behavioral improvements among such target

populations. A control group is necessary to validate further findings. Exploration of a possible testing effect across time would be helpful and further inter-rater reliability measures should be taken, i.e., obtaining ratings at the same time intervals from as many sources as possible (parents, teachers, referring agencies, counselors, etc.). The effect of non-blind raters should also be noted and controlled for in future evaluations.

The development of a sound and comprehensive evaluation is necessary to build up a data base to substantiate program effectiveness and to differentiate among components within and between programs. The WEP 1973 program results encourage further development of the program and its evaluation. Not only is it important to know change is occurring, but it is also important to know how and why this change is occurring. A tighter grasp on aspects associated with change are attempted in the following program through more refined evaluation techniques.

CHAPTER 4

Winter WEP 1974

Winter WEP 1974 consisted of four all-day Sunday cross-country skiing sessions at different locations in the Colorado mountains. Then, participants chose one of three options: 1) continuing four more Sunday day trips; 2) taking two week-end overnights in cabins in the mountains; or 3) self-deselection out of the program. Specifically, option number 2 was designed to systematize learning cross-country skiing techniques with a subsequent task-oriented situation--backpacking on skis and winter camping. In this way, WEP philosophy became the backbone of the present program, Winter WEP 1974, while also making available other alternatives.

The Norwegian Ski Council, an organization of ski manufacturers, became aware of WEP through publicity and generously donated 70 sets of cross country ski equipment to WEP. A potentially effective combination of backpacking, winter camping, and cross-country skiing was realized in this new outgrowth of WEP--Winter WEP 1974.

The present program maintained goals in accordance with previous WEP programs and its effectiveness was measured similarly. An experimental group of youth and staff participants and a control group of youth and staff non-participants were evaluated by similar paper and pencil measures at pre, post and, for the youths, follow-up time intervals to the program.

It was hypothesized that:

1) There would be no significant difference between either the experimental or control groups of either the youth population or

staff population on the pre measures.

2) There would be significant differences at the post and follow-up time intervals between the experimental and control groups of the youth sample and the post time interval between the staff participants (WEP) and the control staff sample.

3) There would be significant differences at each testing interval (pre, post and follow-up) between previous treatment and no previous treatment youth groups (i.e., youths who had prior WEP experience vs. youths who had no prior WEP experience).

4) There would be no significant difference in performance at testing intervals with regard to age, sex, race, or problem category of the youth sample.

Method

Staff

Criteria similar to that used in WEP 1973 was used for selecting 19 counselors (Table 5). Truax et al. (1966) notes that the therapist is the one most important variable determining successful treatment. In a similar vein, the selection of staff in the present program was considered crucial. For this reason, any changes in staff attitudes toward mental health during present WEP participation was monitored (Mental Health Attitude Form, Appendix D) at pre and post time intervals. This inquiry was conducted to assess the effect, if any, the staff may have experienced due to participation in the program. No previous cross-country skiing experience was necessary for selection in Winter WEP 1974 and a surrogate family arrangement similar to WEP 1973 was employed. An additional group of 10 volunteer staff from

Table 5

Staff

	Senior M	Senior F	(PE)	Junior M	Junior F	(PE)	Control M	Control F	(PE)
White	4	6	(5)	3	3	(2)	5	4	(0)
Black	1	0	(0)	0	0	(0)	0	1	(0)
Chicano	2	0	(0)	0	0	(0)	0	0	(0)

Note.--(PE) indicates previous experience with WEP programs

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Jeffco Action Center (JAC) served as a control sample.

Training

With the exception of fewer training sessions, counselor training was similar to that of WEP 1973. An additional dry-land section on types and techniques of cross-country skiing was included.

Subjects

Subject selection criteria similar to WEP 1973 was used (Table 6). A random stratified sample technique was employed to effectively sample various referring agencies. The agencies were informed that of their sample (both referrals and personal choice subjects), one third would be randomly selected for the control and two thirds would participate in the program. A control group and experimental group consisting of 30 and 60 subjects, respectively, were chosen, of these 20 control and 54 experimental subjects completed the program and evaluations. All participants paid a $2 fee. In rare cases payment was waived.

Twenty-eight youths who had participated in summer WEP 1973 and 26 youths who had no prior WEP experience voluntarily participated in the present program. The no previous experience group in contrast with the previous experience group lacked a personal understanding of what to expect from WEP, and as such usually found the program more physically and mentally demanding than anticipated. The no previous experience and previous experience groups which constituted the total experimental sample were analyzed together and separately.

Table 6

Subject Sample Winter WEP 1974

Agency:	Initial Sample Exp. M	Exp. F	Con. M	Con. F	Completed Sample Exp. M	Exp. F	Con. M	Con. F
Fort Logan	7	4	3	3	4	3	2	3
Jeffco Welfare	8	5	3	2	8	5	2	2
DU Child Study Center	7	1	2	0	6	0	2	0
Jeffco Schools (Child Res. Team)	3	1	1	1	3	1	0	1
Denver City Schools	3	0	2	0	2	0	2	0
Arapahoe Mental Health Center	2	0	0	0	2	0	0	0
Gilpin House	2	6	3	3	2	5	1	2
Westside Counseling	2	0	0	0	2	0	0	0
Capitol Hill Recreation Center	6	3	3	4	5	3	0	3
Total	40	20	17	13	37 (54)	17	9 (20)	11

Ethnic:	Completed Sample Exp.	Con.	Denver County
Black	5 (9.25%)	4 (20%)	10%
Chicano	7 (14.8%)	5 (25%)	26%
White	41 (75.9%)	11 (55%)	61%
Other	0	0	3%

Problem Category: as identified by referring agency	Completed Sample Exp.	Con.
Social Adjustment	24	7
Emotional	18	6
Educational	3	5
Behavior Problem	5	2
Poor Self Concept	2	0
No Identified Problem (high incidence area)	2	0

Age:	Completed Sample Exp.	Con.
Mean	12.15	12.06
Range	8-15	8-15

Option:	Previous Participation Complete Data	Incomplete Data	No Previous Particip. Complete Data	Incomplete Data
#1 (continue days)	2	0	2	2
#2 (overnights)	26	0	24	0
#3 (deselection)	0	1	0	3

Instruments

The Peirs-Harris (1963) Self-Esteem Measure (SEM) 80-item edition by Wing (1966) and again, Coopersmith's (1967) Behavior Rating Form (BRF) were used to evaluate the achievement of the goals of Winter WEP 1974. Coopersmith's (1967) Self-Esteem Inventory was discarded in favor of the Peirs-Harris because it was more easily understandable to the youths. The Peirs-Harris, Wing (1966) edition of the Self-Esteem Measure was divided into two equal sections, Form A and Form B (Appendix E and F) to facilitate administration. The administration of this inventory was, then, counterbalanced for practice effects by requiring half the total group to fill out Form A first and half the total group to fill out Form B first. After a short rest period, the corresponding switch in forms was made. Again, the forms were read aloud as in WEP 1973 to control for nonreaders. Each form took 12 to 15 minutes to complete. Along with the leader in reading, another staff member monitored the situation to make sure that everyone was keeping up and not just randomly responding.

Coopersmith's (1967) Behavior Rating Form (Appendix C) was filled out by raters who were knowledgeable of the youth's reason for participation and on the post and follow-up measure by a blind rater also. (No blind raters were used at pre testing, i.e., blind indicates the rater was unaware of whether a youth was a control or an experimental.) This served the purpose of checking inter-rater reliability, which turned out to be .84. The mean number of BRF's returned on each subject was 2.18 for each testing point with a range of 1 to 4. This was variable because some subjects lacked "knowledgeable

enough" raters at certain testing intervals. Sixty-two subjects of the toal 74 received at least one blind BRF rating at both the post and follow-up testing intervals. Because of this variance present in the number of ratings for each subject, the scores were collapsed into one score at each of the three testing points for each subject.

A Mental Health Attitude Form (Appendix D) derived from Cohen and Struening (1963) was filled out by both the experimental and control staff groups to measure their comparability, even though both groups were involved in community social work. This measure served to explore change in attitudes, if any, of the experimental staff as a result of working for WEP. The instrument was scored on a scale of 1 to 7, resulting in a range of 25 to 175 points. A high score indicated a positive attitude toward mental health and a low score indicated a negative attitude toward mental health.

Design

A true experimental design (Campbell & Stanely, 1963) was employed in the present study. Although similar to the WEP 1973 design, the true experimental design eliminates some of the pre experimental design problems. The implementation of a control sample was the major modification in the present study. By employing a control sample, the true experimental design improves the ability to draw inferences from the results and more accurately isolates factors which cause change. Furthermore, the true experimental design measures change with respect to the control sample and not change across time as in WEP 1973. In this way,

the present design maintains greater control over extraneous factors (i.e., maturation effects, testing effects) and thus, permits more precise interpretation of data. For comparison of control and experimental groups, similar testing intervals of pre, post and follow-up were maintained.

In the present study, a within experimental group analysis was performed to assess the effect of previous WEP experience, if any, among the youths and staff. Previous WEP participation was not a factor in either control group. The present design also permitted the exploration of the effect of specific variables such as age, sex, race, problem category of the youth, and program option on the treatment effect.

An overall two-way analysis of variance with repeated measures was employed to obtain an overview of the effects of differential group treatment. This analysis explored three things: 1) the main effect of treatment over time, collapsing groups; 2) the effects of groups, collapsing time; and 3) the interaction between group and time. Planned comparisons were used for independent evaluation of the experimental versus control groups and the previous WEP experience versus no previous WEP experience groups at each testing point. The orthogonal relationship was observed in the analyses of the three cells:

$Cell_1$ = previous experience in WEP and present WEP treatment

$Cell_2$ = no previous experience in WEP and present WEP treatment

$Cell_3$ = a comparable sample group without previous experience in WEP and no present WEP treatment

And,

Planned Comparison$_1$: $Cell_1 + Cell_2$ vs. $Cell_3$

Planned Comparison$_2$: $Cell_1$ vs. $Cell_2$

Results

Esteem Scale Development

A principle components analysis was applied by Peirs-Harris to develop six factors of self esteem. Items with loadings above .30 were inspected and by noting items with the highest loadings, factors were developed. Items were entered in all scales in which loadings were greater than .30 (i.e., same item could appear in more than one scale). The following scales were developed:

I. Behavior

II. Intellectual and School Status

III. Physical Appearance and Attributes

IV. Anxiety

V. Popularity

VI. Happiness and Satisfaction

Table 7 contains a correlation analysis of Winter WEP 1974 pretreatment data on the six Peirs-Harris scales and indicates a high inter-correlation between scales. This may be due to their type of factor scoring (i.e., same item on more than one scale). Because of high intercorrelations, the six scales proposed by Peirs-Harris were not employed and further analysis was conducted to try to develop scales with greater independence, while still maintaining high reliability (internal consistency).

The parcel approach to factoring by Cattell (1972) was used to develop the Winter WEP Esteem Scales (WWES) because there were

Table 7

Peirs-Harris Inter and Internal Consistency Correlations of Winter WEP 1974

	I	II	III	IV	V	VI
I	1.000	0.616	0.358	0.356	0.443	0.646
II	0.616	1.000	0.590	0.489	0.733	0.526
III	0.358	0.590	1.000	0.478	0.598	0.407
IV	0.356	0.489	0.478	1.000	0.522	0.453
V	0.443	0.733	0.598	0.522	1.000	0.550
VI	0.646	0.526	0.407	0.453	0.550	1.000
Pre	.7312	.7760	.7007	.7035	.7589	.7794
Post	.6212	.6350	.7403	.6832	.6273	.7263
Follow-up	.6022	.6450	.7027	.7442	.7030	.6823

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more variables than subjects. First, a correlational analysis was computed on all 80 Peirs-Harris items. Next, parcels were developed which met two criteria: 1) items which demonstrated high intercorrelation (.40) and 2) items which also maintained face validity. Twenty-one parcels were constructed in which each item appeared only once. On the parcels, the principle components factor analysis indicated six factors by the Guttman-Kaiser Dichman root one criterion. The Varimax solution indicated two factors with low-count items, 5 and 4 items respectively and thus, it remained questionable what these weak factors measured. Consequently, these two factors were dropped and a four-factor solution was computed to measure loadings on the 80 items. Again, two criteria needed to be met: 1) a high loading of an item on one and only one factor and 2) an item maintaining face validity. Finally, fifty-four items of the original 80 comprised four scales now termed Winter WEP Esteem Scales (WWES):

I. Self Control -- control one feels he has over himself and/or his environment.

II. Self Concept -- personal perception with regard to physical, intellectual and social skills.

III. Social Acceptance -- perceived competence of interpersonal skills.

IV. Anxiety -- general areas of uncomfortability.

Internal consistency correlations indicated high consistency within the scales. The items which did not add strength to the reliability of the factor were dropped. Table 8 indicates the final internal consistency correlations (Kuder & Richardson, 1937). Scales and item composition with respective loadings are presented

Table 8

Internal Consistency Correlations for WWES

	I	II	III	IV
Pre	.8519	.7176	.8036	.7248
Post	.7935	.6491	.8151	.6253
Follow-up	.7802	.6711	.8188	.5866

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in Table 9. Table 10 summarizes inter-correlational statistics of WWES. The approach used to develop WWES maximized the internal consistency and minimized correlation between scales. The WWES scales were developed to optimally measure independent aspects of the data.

The development of the WWES scales demonstrated some interesting relationships with the Peirs-Harris scales. Table 11 indicates that there is overlap between the Peirs-Harris (1963) scales and WWES scales. Peirs-Harris (1963) scales excluding IV appear to generally collaborate with WWES scales I, II, III. There appears to be mutual independent similarity on both the Peirs-Harris (1963) and WWES Anxiety scales (IV, for both). This is indicated by .781 correlation between scales IV and the relatively low correlation scales IV have with the other scales.

In conclusion, the Winter WEP Esteem Scales (WWES) were used to evaluate the present program because: 1) the scales indicated high independence, 2) the scales indicated high internal consistency correlations and 3) the scales measured some similar aspects to Peirs-Harris (1963) Self-Esteem Measure but are specifically representative of the Winter WEP 1974 program, in that its data was used to develop the scales.

Behavior Scale Development

Coopersmith (1967) developed two scales in the Behavior Rating Form (BRF): Esteem Behavior and Defensive Behavior. In the present study the scales have an intercorrelation of -.06, -.26, and -.51 for pre, post and follow-up measures, respectively. The Defensive Scale is scored opposite to the Esteem Scale (i.e., a decrease in

Table 9

Winter WEP Esteem Scales

Scale and Items	Item Loading
I. Self Control	
12. I am well behaved in school.	.61
14. I cause trouble in my family.	-.39
21. I am good in my school work.	.41
22. I do many bad things.	-.37
25. I behave badly at home.	-.55
26. I am slow at finishing my school work.	-.55
31. In school I am a daydreamer.	-.58
34. I often get into trouble.	-.64
35. I am obdient at home.	.67
38. My parents expect too much of me.	-.49
40. I feel left out of things.	-.39
42. I often volunteer in school.	.36
46. I am the last to be chosen.	-.42
59. My family is disappointed in me.	-.59
66. I forget what I learn.	-.65
II. Self Concept	
5. I am smart.	.22
24. I am good in music.	.28
48. I am often mean to others.	-.51
56. I get into fights.	-.54
64. I am clumsy.	-.46
71. I would rather work alone.	-.32
75. I am always dropping and breaking things.	-.47
78. I think bad thoughts.	-.64
80. I am a good person.	.84
III. Social Acceptance	
2. I am a happy person.	.40
3. It's hard to make friends.	-.41
4. I am often sad.	-.41
9. When I group up I will be an important person.	.34
11. I am unpopular.	-.40
16. I have good ideas.	.42
17. I am an important member of my family.	.21
27. I am an important member of my class.	.38
29. I have pretty eyes.	.60
33. My friends like my ideas.	.59
41. I have nice hair.	.51
51. I have many friends.	.55
57. I am popular with boys.	.57
58. I have a good figure.	.35
49. My classmates think I have good ideas.	.60
69. I am popular with girls.	.69
54. I am good looking.	.49

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Table 9 continued

IV.	Anxiety	
6.	I am shy.	.58
18.	I usually want my own way.	.62
37.	I worry a lot.	.60
55.	I have lots of pep.	-.42
28.	I am nervous.	.58
47.	I am sick a lot.	.20
74.	I am often afraid.	.37

Table 10

Inter-Correlation Matrix for

Winter WEP 1974 Esteem Scales

Scales	I	II	III	IV
I	1.000	0.310	0.289	0.212
II	0.310	1.000	0.280	0.062
III	0.289	0.280	1.000	0.222
IV	0.212	0.062	0.222	1.000

Table 11

Peirs-Harris and Winter WEP 1974

Esteem Scales Inter-Correlation

Peirs-Harris	Winter WEP 1974 I	II	III	IV
I	0.829	0.616	0.353	0.181
II	0.650	0.425	0.734	0.267
III	0.236	0.352	0.823	0.357
IV	0.436	0.174	0.372	0.781
V	0.503	0.211	0.811	0.375
VI	0.680	0.251	0.461	0.245

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score demonstrates less defensive behavior and an increase in score indicates greater esteem behavior). A negative correlation between the two scales would occur as a result of this inverted scoring technique. The correlations indicated that either the raters were becoming more familiar with the form or the youths were changing on the same dimensions. As indicated in Table 12, Defensive and Esteem behavior scales on the BRF demonstrate high internal consistency. The intercorrelations between Winter WEP Esteem Scales and BRF Scales indicated moderate instrument relationship (Table 13).

Mental Health Scale Development

The Mental Health Opinion Measure comprised one scale (25 items). The small sample size precluded building more than one reliable scale.

Analyses

The analyses consisted of two planned comparisons and an overall analysis of variance with repeated measures. Planned Comparison_1 explored the relationship between the previous experience group and the no previous experience group and Planned Comparison_2 explored the control group versus the experimental group at each testing point (pre, post and follow-up). The overall analysis of variance with repeated measures explored the effect of treatment over time. This approach looked at the main effect as well as the interaction between group and time. The results of this form of analysis gives both an indication of effect at specific points and also the relationship across time.

Table 12

Internal Consistency Correlations for BRF Scales

	Esteem Behavior Scale	Defensive Behavior Scale
Pre	.7206	.5502
Post	.6823	.5903
Follow-up	.6942	.6034

Table 13

Inter-Correlation between BRF Scales and WWES

WWES	Coopersmith's BRF					
	Esteem Behavior			Defensive Behavior		
	Pre	Post	Follow-up	Pre	Post	Follow-up
I	.36	.35	.44	-.12	-.25	-.42
II	.09	.31	.27	-.17	-.29	-.26
III	.22	.33	.45	.04	-.16	-.38
IV	.14	.32	.34	.05	-.26	-.23

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Hypothesis (1) stated that there would be no significant difference between the experimental or control groups of the youth population or the staff population at the pre testing interval. The planned comparison analysis supported this hypothesis on all four of the WWES scales and on the Esteem Scale of the BRF (i.e., the experimental and control youth samples did not score significantly different on the premeasure). Planned comparison F-Scores and means for each scale are indicated in Tables 14 and 15, respectively and are shown in Figures 1 and 2. The overall two-way analysis of variance on the Mental Health Attitude Measure indicated non-significant F-Score differences on the premeasure of the experimental and control staff samples (Table 16).

Hypothesis (2) stated that there would be a significant difference on the post and follow-up testing intervals between the experimental ($Cell_1$ and $Cell_2$) and the control ($Cell_3$) groups of the youth sample on the Self-Esteem Measure and the BRF. $Planned\ Comparison_1$ as well as the two-way overall analysis of variance supported this hypothesis. Figures 1 and 2 demonstrate the relationship between the means established in Table 15 of the experimental and control youth and suggest an increase on all scales as a result of treatment. $Planned\ Comparison_1$ indicated significant F-Scores on two of the four WWES scales (I and III), and both of the BRF scales (Defensive and Esteem) on the post measure. The data continue to support hypothesis (2) on the follow-up measure: all F-Scores of the six scales (WWES and BRF) reached significance. The overall analysis of variance also

Table 14

Planned Comparison Analyses

F-Scores

Scale		Pre	Post	Follow-up
WWES Scale				
I	Planned Comparison$_1$	0.00	4.55*	34.83**
	Planned Comparison$_2$	7.63**	12.23**	5.10*
II	Planned Comparison$_1$	.86	.80	4.83*
	Planned Comparison$_2$	5.84*	2.88	.30
III	Planned Comparison$_1$	1.59	10.99**	41.17**
	Planned Comparison$_2$	3.60	2.91	.71
IV	Planned Comparison$_1$	2.27	2.28	30.93**
	Planned Comparison$_2$	4.31*	7.09**	2.08
BRF Scale				
Esteem	Planned Comparison$_1$	.12	6.07*	24.76**
	Planned Comparison$_2$	4.17*	6.45*	8.03**
Defensive	Planned Comparison$_1$	6.19*	9.71**	36.29**
	Planned Comparison$_2$	4.52*	4.99*	10.62**

Note.-- Planned Comparison$_1$ = Experimental vs. Control

Planned Comparison$_2$ = Prior WEP vs. No Prior WEP

* $F(p < .05, df=2/69) \geq 3.99$

** $F(p < .01, df=2/69) \geq 7.04$

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Table 15

Planned Comparison Analyses

Means and SD's

Scale	Group	Pre Mean	Pre SD	Post Mean	Post SD	Follow-up Mean	Follow-up SD	N
WWES								
	PE	11.82	3.37	13.25	1.88	14.25	1.12	28
I	NPE	8.96	4.00	10.42	1.57	12.92	1.75	26
	C	10.28	3.83	10.11	3.43	10.11	3.40	20
	PE	8.14	1.27	8.32	1.23	8.57	0.90	28
II	NPE	6.85	2.25	7.58	1.57	8.38	1.24	26
	C	7.50	2.22	7.56	1.98	7.67	1.86	20
	PE	11.68	2.96	13.36	2.62	14.43	1.74	28
III	NPE	9.81	4.15	11.85	3.42	13.85	2.32	26
	C	4.50	2.03	9.67	3.61	9.72	3.48	20
	PE	5.75	1.66	6.18	0.97	6.61	0.72	28
IV	NPE	4.73	1.68	5.31	1.49	6.15	0.99	26
	C	9.67	3.61	5.06	1.84	4.61	1.74	20
BRF								
	PE	32.18	6.75	37.25	7.51	40.93	6.05	28
Esteem	NPE	28.96	4.76	32.88	5.37	36.65	4.89	26
	C	31.11	5.12	30.83	4.87	31.28	5.13	20
	PE	6.46	2.26	5.75	2.17	4.32	1.31	28
Defensive	NPE	7.85	2.54	7.15	2.44	5.96	2.07	26
	C	8.78	2.20	8.39	2.03	8.17	2.06	20

Note.-- PE = Previous Experience
NPE = No Previous Experience
C = Control

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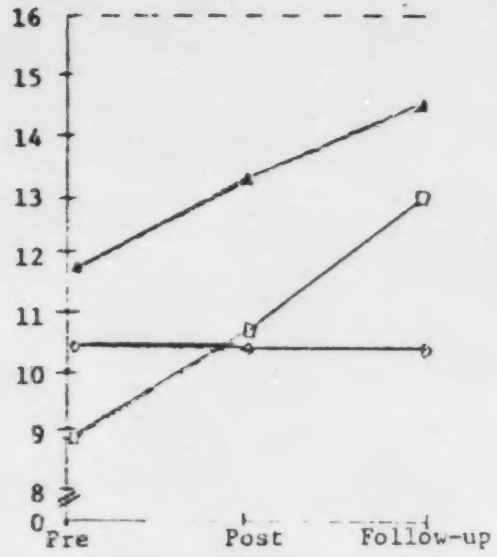
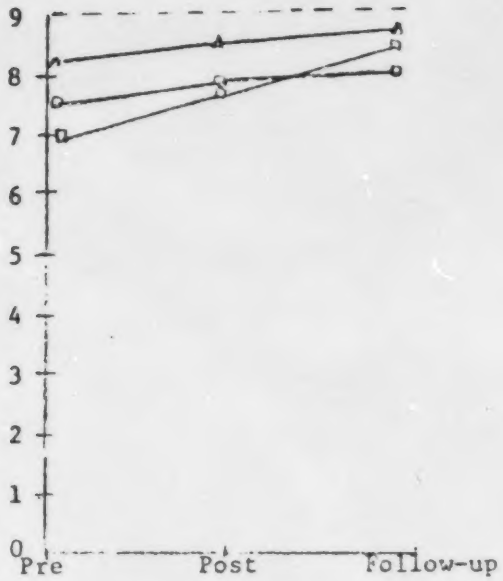
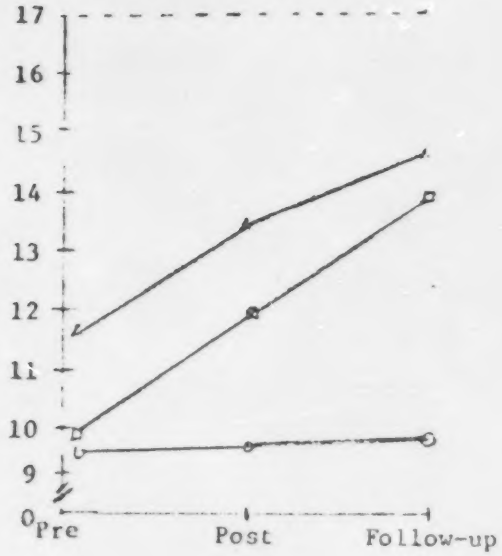
I. Self Control



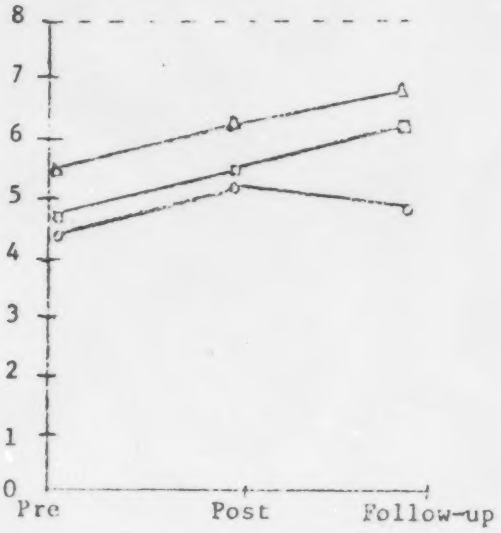
II. Self Concept



III. Social Acceptance



IV. Anxiety



- Ceiling Effect
- Previous Experience
- No Previous Experience
- Control

Figure 1. Differential Group Comparisons on WWES

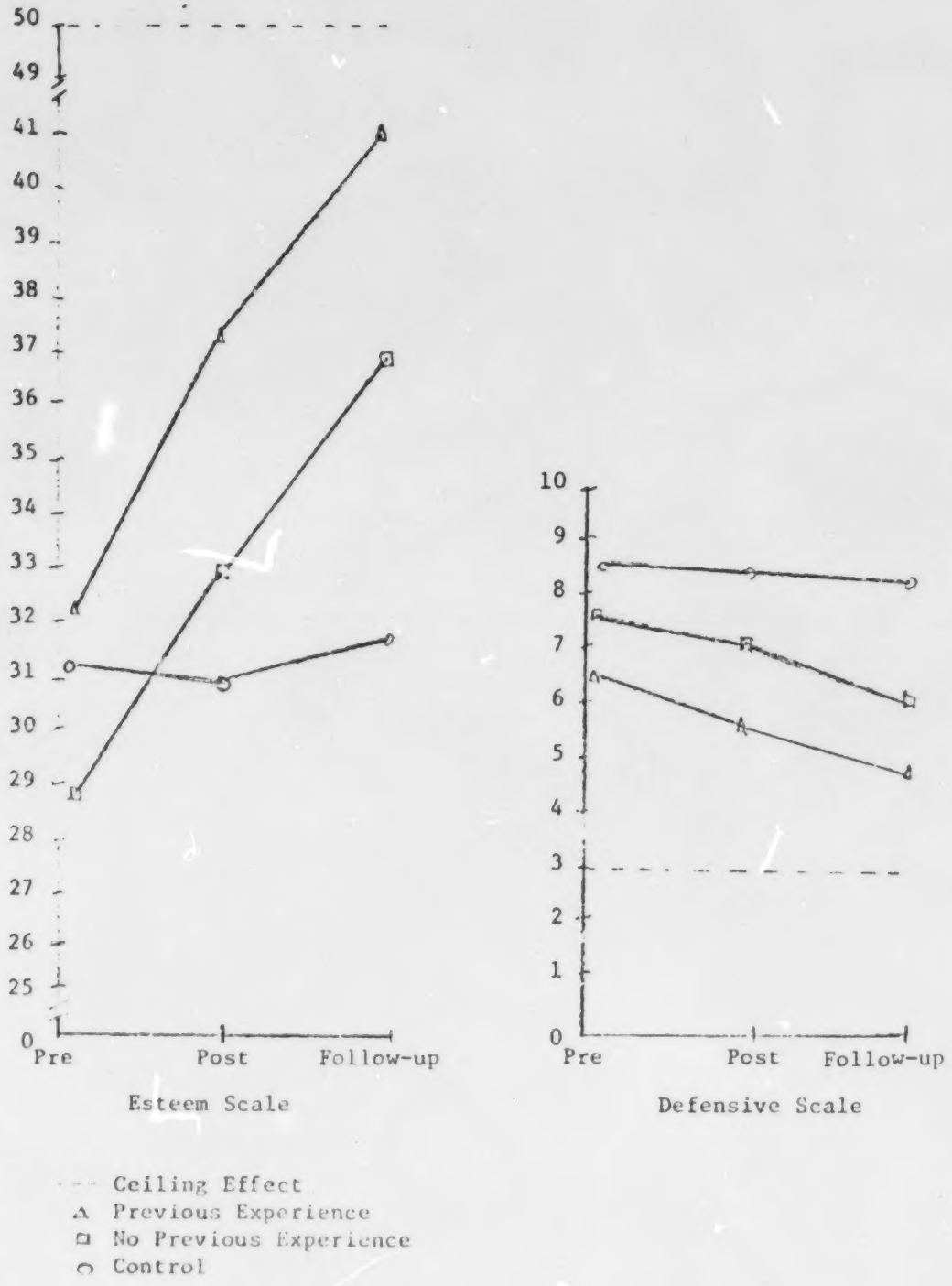


Figure 2. Differential Group Comparisons on the ERP

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Table 16

Means and F-Scores for Mental Health Attitude Form

	Means		
	Pre	Post	F-Score
Experimental	110.7	113.0	.92 (A)
Control	111.7	112.3	.73 (B)
			.63 (AxB)

Note.-- A = pre, post
B = experimental, control

$F(p < .05, df=2/29) \geq 3.33$
$F(p < .01, df=2/29) = 5.42$

supported hypothesis (2): that is a main effect of time collapsed over group (treatment effect) was indicated on all six scales (WWES and BRF). Table 17 indicates the F-Scores of the overall analysis of variance across time.

Hypothesis (2) also stated that the post measure between the experimental and control staff samples would be significantly different. The results of the Mental Health Attitude Measure indicated no significant difference between groups at the post testing interval (Table 16).

Hypothesis (3) stated that there would be significant differences at each testing interval (pre, post and follow-up) between previous ($Cell_1$) and no-previous ($Cell_2$) WEP treatment groups. The results of Planned $Comparison_2$ tend to support this hypothesis (Table 14). Figures 1 and 2 demonstrate the mean relationship between the differential experience groups on each scale and a parallel pattern is evident. Thus, an additive treatment effect seems apparent. An interesting relationship between the two treatment groups ($Cell_1$ and $Cell_2$) at the post and follow-up time interval is shown in Figures 1 and 2.. The previous experience group ($Cell_1$) did not demonstrate as much improvement as the no-previous experience group ($Cell_2$) at the post to follow-up time interval. It is speculated that this could be attributed to two possible causes: 1) the previous experience group ($Cell_1$) is approaching the limits of the instrument because the scores on scales I, II, IV, and VI are two or three points from their ceiling (note Figures 1 and 2); and/or 2) the previous experience group ($Cell_1$) is reaching maximal benefit from the program. The overall two-way

Table 17

Means and F-Scores for WWES and BRF Scales

	Pre	Post	Follow-up	F-Scores
WWES:				
Scale I: Self Control				
PEG	11.821	13.250	14.250	(A)31.3538**
NPEG	8.962	10.423	12.923	(B) 7.2238**
CON	10.278	10.111	10.111	(AxB)10.9592**
Scale II: Self-Concept				
PEG	8.143	8.321	8.571	(A)11.3477**
NPEG	6.846	7.577	8.385	(B) 1.9885*
CON	7.500	7.556	7.667	(AxB) 3.9542**
Scale III: Social Acceptance				
PEG	11.679	13.357	14.429	(A)47.1034**
NPEG	9.808	11.846	13.846	(B) 8.4447**
CON	9.500	9.667	9.722	(AxB)10.8855**
Scale IV: Anxiety				
PEG	5.750	6.179	6.607	(A)14.9870**
NPEG	4.731	5.308	6.154	(B) 7.0792**
CON	4.500	5.056	4.611	(AxB) 4.4385*
BRF:				
Scale V: Esteem				
PEG	32.179	37.250	40.929	(A)158.9448**
NPEG	28.962	32.885	36.654	(B) 6.0872**
CON	31.111	30.833	31.278	(AxB)38.4823**
Scale VI: Defensive				
PEG	6.46	5.75	4.32	(A)58.6000**
NPEG	7.85	7.15	5.96	(B)11.5035**
CON	8.78	8.36	8.17	(AxB) 5.9680**

Note.-- WWES: * $F(p < .05, df=2/69) \geq 3.13$
** $F(p < .01, df=2/69) = 4.92$

BRF: * $F(p < .05, df=2/69) \geq 3.15$
** $F(p < .01, df=2/69) \geq 4.92$

PEG = Previous Experience Group
NPEG = No Previous Experience Group
CON = Control

A = pre, post, follow-up; B = PEG, NPEG, CON

analysis of variance indicated a main effect of group collapsed over time. The effect of group was not as great as the effect of time but was of a significant level (Table 17). The interaction between the group cells and the time of testing indicated that the effects of time were quite different depending upon the specific group. The control group showed essentially no change over time, while the experimental groups improved substantially from time 1 to time 2 and from time 2 to time 3.

Hypothesis (4) stated that there would be no significant difference in performance at testing intervals with regard to age, sex, race, or problem category of the youths. No differences were found using an independent one-way analysis of variance, except for race. However, this result was considered too weak to report due to the very small and unbalanced subject numbers.

Addendum

Regardless of the change in design, many of the aspects of WEP 1973 and the present program are comparable. The results support one another and thus, help substantiate the therapeutic effect of WEP. It should be noted that the previous experience group of the present program has no comparison group in WEP 1973. Therefore, comparison was made only between the present program's no previous experience group and the 1973 program's experimental group, all of whom had no previous experience at the time of the 1973 program.

A comparison of the subject samples of WEP 1973 and the present program on the percentage of youths who demonstrated positive gains, no change, and negative gains on a composite

score of the self-esteem measures (Coopersmith and Peirs-Harris) and the Behavior Rating Form is shown in Tables 18 and 19. Although the esteem measures are different, they appear to measure similar concepts of self-esteem: the scales developed from the data of 1973 and the present program were similar and indicated similar results. The percentages indicated nearly identical results: 1) that the youths responded similarly on the instruments and 2) that the youths reported similar changes in each program.

The composite mean scores of the self-esteem measures show similar change relationships over testing intervals, but a different relationship to their standardized mean. The 1973 WEP composite mean started below the standardized Coopersmith mean and ended just above the starting composite WEP 1974 mean. On the premeasure the WEP 1974 no-previous experience group and control group scored just below and the previous experience group scored just above the Peirs-Harris standardized composite. All WEP 1974 groups far exceeded the standardized composite at the post and follow-up points (Table 19). The selection of the appropriate instrument for further evaluation needs to be assessed to obtain the more accurate indicator and to avoid a possible ceiling effect.

A comparison of the youth sample of 1973 and 1974 indicated that the population comprising the programs shifted from a combination of several problems in 1973 toward emotional, educational and behavioral problems in 1974. Cortez (1972) and Knott (1973) reported these to be predecessors of delinquency in the lower socio-economic classes. Interestingly, the majority of WEP's subject sample contains lower socio-economic youths. Thus, although

Table 18

Comparison of Percentages on Individual Composite Scores of WEP 1973 and Winter WEP 1974

	Self-Esteem Measure			Behavior Rating Form		
	Pos.	NC	Neg.	Pos.	NC	Neg.
Pre/Post						
WEP 1973 (no previous experience)	66	12	22	61	23	16
Winter WEP 1974 (no previous experience)	63	10	25	64	14	22
Post/Follow-up						
WEP 1973 (no previous experience)	81	12	7	78	7	15
Winter WEP 1974 (no previous experience)	82	17	11	80	9	11

Note.-- Pos. = Positive Change
NC = No Change
Neg. = Negative Change

Table 19

Mean Composite Scores Compared

with Instrument Standardization

	Standardized	Pre	Post	Follow-up
Coopersmith	71.5			
WEP 1973		61.62	66.27	71.45
Peirs-Harris (normative composite)	53.43			
WEP 1974: Previous Exp.		57.45	63.96	71.44
No Prev. Exp.		51.23	55.45	62.84
Control		52.17	53.50	53.22

the actual number of anti-social youths may have decreased from 1973 to 1974, a potential for delinquent behavior development may still have been present. This suggests that WEP treated youths prior to the crisis stage of adjudicated delinquency and may have arrested its development.

Observational comments were not obtained in the 1974 program because of their suspect nature and the implied lack of validity for drawing any comparison.

In summation, it was demonstrated that the WEP 1973 program and the 1974 program supported each others findings and gave combined strength to the effectiveness of WEP as a constant, viable, therapeutic approach.

Discussion

The results of Winter WEP 1974 indicated two main effects: that of treatment and of group. The treatment effect demonstrated that positive change occurred for participants as measured by the Peirs-Harris Self-Esteem Measure and the Behavior Rating Form instruments at post and follow-up time intervals. Thus, positive change occurred during the treatment period and continued beyond the post treatment point. No change was demonstrated in the present program's control group which supports the positive results of the treatment group. The main effect of groups and the significant interaction indicated that the treatment effect was not the same for all groups: the control group showed no change over time, the no-previous experience group showed significant change ($p < .01$), and the previous experience group showed significant change ($p < .01$). at an elevated level on the instruments. The results of the group effect suggested

a building block concept of treatment (Figure 1) over participation in two subsequent programs. Youths who had previous WEP participation scored higher than no-previous participation youths on the instruments. Although a possible cause for the elevated scores of the previous participation youths on the instruments may be due to their familiarity in filling out this type of form, it seems improbable because a change in instruments was made from the Coopersmith Self-Esteem Inventory (1967) to the Peirs-Harris Self-Esteem Measure (1963). Thus, the previous experience group results indicated not only an immediate treatment effect but also a longer term effect, (i.e., from summer 1973 to Winter 1974), on both the BRF and the self-esteem measure. A one-year follow-up should be incorporated to further substantiate these results. Support for this longevity contention is evident in the premeasure of the previous experience group which demonstrates sustained improvement over an eight-month period. However, it should be noted that the previous experience group voluntarily returned and thus, shows a high degree of interest in the program.

The results of the previous treatment group elucidates the question of the optimal number of program sessions per youth. As demonstrated in Figures 1 and 2, previous participation youths do not show as great a change at the follow-up testing point as the no-previous participation youths. This may have occurred for one or both of the following reasons (note Figures 1 and 2): 1) the previous treatment youths had reached the optimal number of treatment sessions and/or 2) the ceiling effect of the instruments was reached. To address these concerns, further program and instrument development and evaluation are necessary.

WWES Scales I and III, Self Control and Social Acceptance, and both BRF Scales, Esteem and Defensive, indicated the greatest change. Congruent with the goals and atmosphere of the present program, these results demonstrated the present program's effectiveness. Although not as great a change occurred on WWES Scales II and IV, Self Concept and Anxiety, it seems reasonable that these aspects of one's personality are more deeply internalized and would require longer treatment periods to change. This would constitute an avenue for exploration in long term follow-up.

Race was the only specific variable which indicated significant differences from the total youth sample. However, the unbalanced and limited subject sample renders this finding weak and further exploration of this question would be necessary to substantiate this result.

Age and Sex appear to warrant further specific variable exploration. Older youths seemed to improve more (not significantly) in the present program. However, they also scored lower initially. Younger youths demonstrated less change across testing intervals. A higher (not significantly) score was obtained by females at all testing points on the instruments of the present program. It is not known if this was a function of the instruments or treatment. However, Coopersmith (1967, page 10) reported females scored higher than males on his self-esteem inventory. Until further WEP sex-elaborative measurements are reported, the higher female score will be attributed to differential self-esteem, as a function of sex.

The effectiveness of treatment is not only attributed to the wilderness experience *per se* and the therapeutic aims, but also their combination with the open communication and clear expectations established by the staff. In this way, the youth's old system of blaming another and avoiding responsibility was attacked. Furthermore, the novelty of the wilderness environment for the youths coupled with the immediate and consistent wilderness feedback must also be considered as crucially important in the behavior change. The youths began to engage in self-evaluation and consequently, to experience internal satisfaction as a function of their novel experience with control over their behavior in the wilderness setting. Before the WEP experience, typically, the youths only know how to react to an environment which acts upon them (i.e., parental) and the nature of their behavior is reaction. Subsequent to the program, however, youths indicate a rise in self-esteem. Evidently, "natural" consequences and the wilderness experience permit the development of internal control and self-evaluation and the nature of their behavior becomes action, actively engaging in action as well as reaction. This indicates an ability of the youths to meet the therapeutic goals of the program. This new system of interaction is more easily fostered within a novel environment (Mettee, 1974) and reinforced by the immediacy of wilderness feedback. For example, if one builds a fire correctly, it produces the desired warmth; however, if one mispacks his equipment, it may get wet and only cause discomfort and coldness.

Unlike the youth's urban environment in which feedback can be low, nondirect, or confusing (i.e., on the average a youth goes eight times to court before a deposition is made), the wilderness responds consistently, firmly, and directly. This exactness could possibly never be reached by an individual therapist and acts as a catalyst for behavior change.

It is evident that the more sophisticated evaluation of the present program has rendered more elaborate results over past programs. This trend in refined program evaluation must continue to reach efficient program operation. It is now apparent that such concerns as long-term follow-up must be addressed more thoroughly. The data indicates a greater improvement across the follow-up period than during the treatment period which suggests an incubation period for the youth to internalize his new skills at an operational level. Does the youth continue to use the new problem-solving skills and the new socialization skills that have become a part of his repertoire upon departure from WEP? It seems reasonable that comfortability with a new interaction style would increase over time as a function of practice and more extensive long-term follow-up would adduce these concerns.

More elaborate evaluation of the youths according to specific referral problem would be valuable to assess. For example, a youth referred for academic deficiencies would also be evaluated on an academic achievement measure. Perhaps, because a youth feels better about himself/herself (i.e., improved self-esteem), he/she would subsequently perform better

academically. This could only be known through such additional evaluation. No evaluation has been done to assess the remediation of specific referral problems to date.

Another interesting question, to elucidate more powerful change mechanisms within the program, would be to evaluate change with regard to specific program requisites. It might be valuable to obtain youth information according to program design; for example, compare a group of youths who had participated in total WEP vs. a group of youths who had participated in a WEP program lacking a group solo element. In this way, knowledge of the parts of the program which precipitated change could be gained.

A methodological concern of future programs must be the ceiling effect of instruments. Instruments which not only measure the variables of interest but also remain psychometrically sound need to be employed. Also, more control should be employed in implementing the instruments (i.e., using more extensive blind rater techniques on the BRF).

The approach of the present program clearly demonstrates the wilderness as a powerful, therapeutic milieu. The time is ripe for further wilderness program development and systematic evaluation must continue, and more rigorously. On a final note, a word of concern is in order. Although the wilderness has proven to be effective and cost efficient, extensive preparation and great caution must be exercised. Unlike other therapeutic modalities, the wilderness presents a unique combination of mentally and physically challenging situations for both participants and staff.

Unless extremely careful, potential dangers of life and limb as well as mind are realized. It can not be denied that "mother nature knows no conscience even in her great beauty."

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Appendix A

WEP 1973

Schedule

First Week:

Sunday: Leave Jeffco Action Center for base camp in Shawnee, Colorado; start wilderness training.

Monday: Continue training (setting up camp, reading maps, etc.); discussion of how and why to make decision on your own.

Tuesday thru Friday: Four-day pack trip on trail with rotating leaders; return to Denver Friday, 9PM.

Second Week:

The counselors meet with the families and referring agency of each youth to explain the goals of WEP, and to answer any questions. There are two reasons for this: 1) to get in contact with and to give information to the people involved with the youths and 2) to find out if the youth's problems are consistent with those WEP feels need improvement.

Third Week:

Sunday thru Wednesday: Youths leave Jeffco directly for trail head. Participation in group wilderness experience program with counselors resumes.

Thursday thru Saturday: Campers go on independent group solo with counselors remaining about ½ mile behind.

Fourth - Eighth Week:

Supportive follow-up is instituted.

Detailed Outline

Week 1: Day 1

The group of participants walked one and a half miles up to base camp from the bus drop-off point for an organization and orientation meeting of all program members.

Organization and Orientation: Groups were formed and counselors and respective members of separate groups got to know one another. There was discussion on group functioning as a workable unit and counselors emphasized that they were not babysitters. Also, the groups discussed the benefits of working together i.e., comfort vs. existence. Supplies were issued (tents, packs, etc.). Campers selected partners, set up and prepared two-man tents.

Therapeutic Mode Established: Counselors assumed a teacher/instructor role to demonstrate camping techniques (lighting fires, etc.). Campers then were expected to try these. Counselors gave help only when appropriately solicited, and tried to deal in process rather than content of situations (i.e., how one solves a problem, not how one solves the problem). This was accomplished by presenting the youths with problem solving techniques (process, i.e., democratic, authoritarian, etc.). For instance, a camper who exclaimed, "My tent won't stay up" was responded to with "Yes, that's true." The camper was not assumed to need help unless specifically stated; thus forcing the child to take a role in which he could choose to solicit help or to struggle with the problem himself. The establishment of the "helpless child" syndrome was thus, hopefully, avoided. Counselors, however, encouraged partners to work together to solve problems (peer socialization).

Day 2: Goals

Groups talked about goals of developing skills in camping and mountaineering stressing group effort and cooperation. A concentrated training program in map reading, first aid, packing packs,

etc., was conducted. The basic group activity of rock climbing was initiated.

Therapeutic Considerations: This training gave the youths the essential tools for survival in the wilderness (tool information, skill development, approach to the problem: wilderness). Experimenting with these new tools challenged their development of problem solving skills and their ability to retain and implement their acquired camping techniques. Furthermore, rock climbing encouraged peers to teach and help each other (i.e., youths spot-checking each other). Peer trust was tapped and fostered by this real and somewhat dangerous situation. At a final group gathering, the day's events were discussed around a camp fire before turning in. Again, emphasis was placed on process of handling situations.

Day 3 thru 6: Goals

Mountaineering and socialization skills were developed on the trail. Leadership responsibilities were rotated among the youths, including such responsibilities as: reading the map, choosing the trail, and choosing the next leader. This gave the youths responsibilities as well as authority. Counselors were also chosen by the youths to be leaders but no one could be a leader twice to avoid the establishment of always choosing a counselor to be a leader.

Therapeutic Considerations: Counselors assumed the role of "member" of the group and supported campers' implementation of new skills. Problem solving on the personal and social level were practiced through role playing as well as actual situational

occurrences. Decision making situations (leadership responsibilities) were effective and powerful in developing positive behavioral control. Assuming responsibility and authority enhanced their excitement to perform leadership responsibilities appropriately. Also, by giving these youths positions of control, and allowing them to make decisions, a desire to work effectively together was ignited (peer socialization). The appropriateness of a particular decision was corrected if there were major problems with the choice (i.e., dangerous).

Week 2: At home

A greater understanding of campers' weaknesses and strengths at home and school was gained by the counselors. The program's goals and activities were explained to parents and referral agencies. This facilitated cooperative effort for follow-up measures. (For this period to be more effective, more structure and guidelines needed to be established for the 1974 program.)

Week 3: Day 1 thru 4: Goals

Proficiency in camping skills was increased. The challenge of experimentation in the wilderness with new skills was emphasized. Counselors continued to support youths for initiating and making decisions while also making available other approaches and suggestions (again, process vs. content). Revolving leadership responsibilities were continued on the pack trail.

Therapeutic Considerations: Problem-solving techniques were incorporated into the interactions of the youths. Development of feelings of control, awareness, and responsibility for decision making ability in choice situations was enhanced.

Day 5 and 6: Goals

The final sessions stressed testing camping and socialization skills through an environmental task. On the morning of the 5th day, all necessary equipment was made available for campers (cooking utensils, ponchos, etc.) to select what was needed (choice left to camper). Campers were, then, given the rendezvous point on the topographical map for the late afternoon meeting of the following day. How they got there, where they camped, who lead the group were all responsibilities left up to the campers. Counselors followed about a half mile behind. A signal of three blasts on a whistle was their method to indicate danger or needed help. (This is a universal signal in the wilderness.) Any questions campers had were answered before departure.

Therapeutic Considerations: Wilderness survival skills were tested through milieu of peer trust and cooperation. Group (peer) cohesiveness became a reality. Campers were given support for demonstrating responsible and appropriate behavior.

Wrap-up Session:

It was important to make permanent the newly developed interpersonal approach experienced in the wilderness training experience. At the final rendezvous point campers were encouraged to share feelings and accomplishments. The feedback session usually lasted two hours, in which time all people gave feedback to every other member of the group (youths as well as counselors). There was a final vote for that person whom the campers felt got the most from the experience (not necessarily the best camper), and a reward for his improvement.

Appendix B

Self-Esteem Inventory (SEI)

Please mark each statement in the following way:

If the statement describes how you usually feel, put an X in the column, "Like Me."

If the statement does not describe how you usually feel, put an X in the column "Unlike Me."

There are no right or wrong answers.

		Like Me	Unlike Me
1.	I spend a lot of time daydreaming.		
2.	I'm pretty sure of myself.		
3.	I often wish I were someone else.		
4.	I'm easy to like.		
5.	My parents and I have a lot of fun together.		
6.	I never worry about anything.		
7.	I find it very hard to talk in front of the class.		
8.	I wish I were younger.		
9.	There are lots of things about myself I'd change if I could.		
10.	I can make up my mind without too much trouble.		
11.	I'm a lot of fun to be with.		
12.	I get upset easily at home.		
13.	I always do the right thing.		
14.	I am proud of my school work.		
15.	Someone always has to tell me what to do.		
16.	It takes me a long time to get used to anything new.		
17.	I'm often sorry for the things I do.		
18.	I'm popular with kids my own age.		

		Like Me	Unlike Me
19.	My parents usually consider my feelings.	_____	_____
20.	I'm never unhappy.	_____	_____
21.	I'm doing the best work that I can.	_____	_____
22.	I give in very easily.	_____	_____
23.	I can usually take care of myself.	_____	_____
24.	I'm pretty happy.	_____	_____
25.	I would rather play with children younger than me.	_____	_____
26.	My parents expect too much of me.	_____	_____
27.	I like everyone I know.	_____	_____
28.	I like to be called on in class.	_____	_____
29.	I understand myself.	_____	_____
30.	It's pretty tough to be me.	_____	_____
31.	Things are all mixed up in my life.	_____	_____
32.	Kids usually follow my ideas.	_____	_____
33.	No one pays much attention to me at home.	_____	_____
34.	I never get scolded.	_____	_____
35.	I'm not doing as well in school as I'd like to.	_____	_____
36.	I can make up my mind and stick to it.	_____	_____
37.	I really don't like being a boy--girl.	_____	_____
38.	I have a low opinion of myself.	_____	_____
39.	I don't like to be with other people.	_____	_____
40.	There are many times when I'd like to leave home.	_____	_____
41.	I'm never shy.	_____	_____
42.	I often feel upset in school.	_____	_____

		Like Me	Unlike Me
43.	I often feel ashamed of myself.	_____	_____
44.	I'm not as nice looking as most people.	_____	_____
45.	If I have something to say, I usually say it.	_____	_____
46.	Kids pick on me very often.	_____	_____
47.	My parents understand me.	_____	_____
48.	I always tell the truth.	_____	_____
49.	My teacher makes me feel I'm not good enough.	_____	_____
50.	I don't care what happens to me.	_____	_____
51.	I get upset easily when I'm scolded.	_____	_____
52.	I'm a failure.	_____	_____
53.	Most people are better liked than I am.	_____	_____
54.	I usually feel as if my parents are pushing me.	_____	_____
55.	I always know what to say to people.	_____	_____
56.	I often get discouraged in school.	_____	_____
57.	Things usually don't bother me.	_____	_____
58.	I can't be depended on.	_____	_____

Appendix C

Behavior Rating Form (BRF)

1. Does this child adapt easily to new situations, feel comfortable in new settings, enter easily into new activities?

_____always _____usually _____sometimes _____seldom _____never
5 3 1

2. Does this child hesitate to express his opinions, as evidenced by extreme caution, failure to contribute, or a subdued manner in speaking situations?

_____always _____usually _____sometimes _____seldom _____never
1 3 5

3. Does this child become upset by failures or other strong stresses as evidenced by such behaviors as pouting, whining, or withdrawing?

_____always _____usually _____sometimes _____seldom _____never
1 3 5

4. How often is this child chosen for activities by his classmates? Is his companionship sought for and valued?

_____always _____usually _____sometimes _____seldom _____never
5 3 1

5. Does this child become alarmed or frightened easily? Does he become very restless or jittery when procedures are changed, exams are scheduled or strange individuals are in the room?

_____always _____usually _____sometimes _____seldom _____never
1 3 5

6. Does this child seek much support and reassurance from his peers or the teacher, as evidenced by seeking their nearness or frequent inquiries as to whether he is doing well?

_____always _____usually _____sometimes _____seldom _____never
1 3 5

7. When this child is scolded or criticized, does he become either very aggressive or very sullen and withdrawn?

_____always _____usually _____sometimes _____seldom _____never
1 3 5

8. Does this child depreciate his school work, grades, activities, and work products? Does he indicate he is not doing as well as expected?

_____always _____usually _____sometimes _____seldom _____never
1 3 5

9. Does this child show confidence and assurance in his actions toward his teachers and classmates?

_____always _____usually _____sometimes _____seldom _____never
5 3 1

10. To what extent does this child show a sense of self-esteem, self-respect, and appreciation of his own worthiness?

_____very strong _____strong _____medium _____mild _____weak
5 3 1

11. Does this child publicly brag or boast about his exploits?

_____always _____usually _____sometimes _____seldom _____never
5 3 1

12. Does this child attempt to dominate or bully other children?

_____always _____usually _____sometimes _____seldom _____never
5 3 1

13. Does this child continually seek attention, as evidenced by such behaviors as speaking out of turn and making unnecessary noises?

_____always _____usually _____sometimes _____seldom _____never
5 3 1

Two Scores - Esteem Behavior (1-10)
Defensive Behavior (11-13)
Maximum 50/15

Appendix D

Opinions About Mental Health

The statements that follow are opinions or ideas about mental illness. By mental illness, we mean the kinds of illness which brings patients to seek help. There are many differences of opinion about this subject. In other words, many people agree with each of the following statements while many people disagree with each of these statements. We would like to know what you think about these statements. On the questions below, please check (x) in the space provided that choice which comes closest to saying how you feel about each statement. You can be sure that many people will agree with your choice. There are no right or wrong answers: we are interested only in your opinion.

1. Emotional problems usually result when people work too hard.

strongly disagree _____ neutral _____ strongly agree

2. Mental illness is an illness like any other.

strongly disagree _____ neutral _____ strongly agree

3. Most people receiving treatment for emotional problems are dangerous.

strongly disagree _____ neutral _____ strongly agree

4. If parents loved their children more, there would be less mental illness.

strongly disagree _____ neutral _____ strongly agree

5. It is easy to recognize someone with mental illness.

strongly disagree _____ neutral _____ strongly agree

6. People who are mentally ill let their emotions control them; normal people think things out.

strongly disagree _____ neutral _____ strongly agree

7. People who were once in treatment are more dangerous than the average citizen.

strongly disagree _____ neutral _____ strongly agree

8. People who seek treatment for emotional problems are better off than those who don't.

strongly disagree neutral strongly agree

9. When a person has a problem or worry, it is best for him/her not to think about it but keep busy with more pleasant things.

strongly disagree neutral strongly agree

10. Although they usually aren't aware of it, many people become mentally ill to avoid the difficult problems of everyday life.

strongly disagree neutral strongly agree

11. Most people with emotional problems are willing to hold down a job.

strongly disagree neutral strongly agree

12. Small children should be removed from custody of a parent with emotional problems.

strongly disagree neutral strongly agree

13. More tax money should be spent on mental health programs.

strongly disagree neutral strongly agree

14. People who are successful in their work seldom have emotional problems.

strongly disagree neutral strongly agree

15. People would not have emotional problems if they avoided bad thoughts.

strongly disagree neutral strongly agree

16. Poor parenting causes most emotional problems in children.

strongly disagree neutral strongly agree

17. Children with emotional problems should receive immediate attention.

strongly disagree neutral strongly agree

18. A heart patient has just one thing wrong, while an emotionally ill person is completely different from others.

strongly disagree neutral strongly agree

19. Mental patients come from homes where the parents took little interest in their children.

strongly disagree neutral strongly agree

20. If the children of mentally ill parents were raised by normal parents they would probably not become mentally ill.

strongly disagree neutral strongly agree

21. The mental illness of many people is caused by separation or divorce of their parents during childhood.

strongly disagree neutral strongly agree

22. To receive treatment for emotional problems is to become a failure in life.

strongly disagree neutral strongly agree

23. Mental illness is usually caused by some disease of the nervous system.

strongly disagree neutral strongly agree

24. To receive treatment for emotional problems is worthwhile.

strongly disagree neutral strongly agree

25. Adequate services are available to children with difficulty at school or home.

strongly disagree neutral strongly agree

Name _____ Date _____ Age _____

Have you ever worked with WEP before? _____

Did you attend the counselor training meetings? _____

Appendix E

NAME _____ AGE _____

GIRL OR BOY _____ DATE _____

GRADE _____ SCHOOL _____

HAVE YOU BEEN IN WILDERNESS EXPERIENCE PROGRAM BEFORE? YES ____ NO ____

1. My classmates make fun of me ..... yes no
2. I am a happy person ..... yes no
3. It is hard for me to make friends ..... yes no
4. I am often sad ..... yes no
5. I am smart ..... yes no
6. I am shy ..... yes no
7. I get nervous when the teacher calls on me ..... yes no
8. My looks bother me ..... yes no
9. When I grow up, I will be an important person ..... yes no
10. I get worried when we have tests in school ..... yes no
11. I am unpopular ..... yes no
12. I am well behaved in school ..... yes no
13. It is usually my fault when something goes wrong ..... yes no
14. I cause trouble to my family ..... yes no
15. I am strong ..... yes no
16. I have good ideas ..... yes no
17. I am an important member of my family ..... yes no
18. I usually want my own way ..... yes no
19. I am good at making things with my hands ..... yes no
20. I give up easily ..... yes no
21. I am good in my school work ..... yes no
22. I do many bad things ..... yes no
23. I can draw well ..... yes no
24. I am good in music ..... yes no
25. I behave badly at home ..... yes no
26. I am slow in finishing my school work ..... yes no
27. I am an important member of my class ..... yes no
28. I am nervous ..... yes no
29. I have pretty eyes ..... yes no
30. I can give a good report in front of the class ..... yes no
31. In school I am a dreamer ..... yes no
32. I pick on my brother(s) and sister(s) ..... yes no
33. My friends like my ideas ..... yes no
34. I often get into trouble ..... yes no
35. I am obedient at home ..... yes no
36. I am lucky ..... yes no
37. I worry a lot ..... yes no
38. My parents expect too much of me ..... yes no
39. I like being the way I am ..... yes no
40. I feel left out of things ..... yes no

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NAME _____ AGE _____

GIRL OR BOY _____ DATE _____

GRADE _____ SCHOOL _____

HAVE YOU BEEN IN WILDERNESS EXPERIENCE PROGRAM BEFORE? YES_____ NO_____

1. I have nice hair ..... yes no
2. I often volunteer in school ..... yes no
3. I wish I were different ..... yes no
4. I sleep well at night ..... yes no
5. I hate school ..... yes no
6. I am among the last to be chosen for games ..... yes no
7. I am sick a lot ..... yes no
8. I am often mean to other people ..... yes no
9. My classmates in school think I have good ideas ..... yes no
10. I am unhappy ..... yes no
11. I have many friends ..... yes no
12. I am cheerful ..... yes no
13. I am dumb about most things ..... yes no
14. I am good looking ..... yes no
15. I have lots of pep ..... yes no
16. I get into a lot of fights ..... yes no
17. I am popular with boys ..... yes no
18. People pick on me ..... yes no
19. My family is disappointed in me ..... yes no
20. I have a pleasant face ..... yes no
21. When I try to make something, everything seems to go wrong ..... yes no
22. I am picked on at home ..... yes no
23. I am a leader in games and sports ..... yes no
24. I am clumsy ..... yes no
25. In games and sports, I watch instead of play ..... yes no
26. I forget what I learn ..... yes no
27. I am easy to get along with ..... yes no
28. I lose my temper easily ..... yes no
29. I am popular with girls ..... yes no
30. I am a good reader ..... yes no
31. I would rather work alone than with a group ..... yes no
32. I like my brother (sister) ..... yes no
33. I have a good figure ..... yes no
34. I am often afraid ..... yes no
35. I am always dropping or breaking things ..... yes no
36. I can be trusted ..... yes no
37. I am different from other people ..... yes no
38. I think bad thoughts ..... yes no
39. I cry easily ..... yes no
40. I am a good person ..... yes no

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THE DEVELOPMENT AND EVALUATION OF A THERAPEUTIC WILDERNESS PROGRAM FOR PROBLEM YOUTH

An Abstract of a Thesis

Presented to

the Faculty of the Graduate School of Arts and Sciences

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

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by

William Wales Porter

March 1975

Abstract

An innovative therapeutic use of the wilderness environment has been explored in the present paper. A purely recreational outdoor camping program organized in 1971 for economically deprived youths subsequently developed into an outdoor therapeutic program designed for problem youth. The wilderness environment was employed as an effective treatment milieu for helping youths develop responsibility and trust.

Cursory evaluation of early programs indicated the therapeutic potential of the wilderness; however, more sophisticated evaluations were needed to substantiate the reported positive outcomes. A therapeutic approach including transactional analysis, assertive training, personal causation and modeling theories was drafted and incorporated into an effective treatment modality of the Wilderness Experience Program to meet the goal of developing an overall emancipated youth. Evaluation of 124 participants in the 1973 program and of 54 participants in the winter 1974 program by two paper and pencil inventories, a self-esteem measure and a behavior rating form, indicated positive results in both programs. A control group, employed in the 1974 program design, showed no consistent improvement on these measures. Furthermore, the results suggest a transfer of the newly acquired problem solving skills learned in the wilderness environment to school and home environments upon termination from the wilderness program.

Although more extensive evaluation and more sophisticated research needs to be developed and conducted to isolate more accurately the change associations occurring, it can not be

denied that the Wilderness Experience Programs' success demonstrates the value of an alternative form of therapeutic treatment.

CHAPTER 1

Literature Overview

Many approaches to therapeutic program development for problem children have been explored (Beker, 1960; Lovass, 1966; Berne, 1967; Kole & Busse, 1969, 1971; DeCharms, 1972; Klugger, 1972; Hobbs & Shelton, 1972; Rawson, 1973; Willman & Chun, 1973; Blackmore, 1974). Two central issues involving the effectiveness of such programs are: 1) control of the learning environment and 2) generalization of the learned behaviors to actual life situations. In some in-patient treatment programs (i.e., token economies), a child's behavior is controlled by external reinforcement of an appropriate performance level; however, data indicates a high recidivism to prior-to-treatment behavior (Truax, 1966). Such programs even though they greatly control the learning environment appear to fall short of achieving internalization of behavioral improvements. Furthermore, although removing a child from his problem environment (i.e., institutionalization) may have the advantage of more control over therapeutic goals, it runs the risk of being a lengthy separation from family and peers which might cause adjustment problems on return to the actual life situation, i.e., hindering generalization of learned behaviors (Clement, 1967; Rose, 1972). Non-residential treatment programs (group clinics, outpatient clinics, social-work agencies) while not suffering from the problems of lengthy separation seem to suffer from lack of control due to an inability to maintain a consistent therapeutic program, i.e., cancellation rate is very high (Garfield & Bergen, 1971). To strengthen the

effects of a particular program an effective balance between the two central approaches is essential.

Therapeutic camping programs have been explored and found to be effective treatment modalities (Beker, 1960; Blackmore, et al., 1974; Hobbs & Shelton, 1972; Kaplan, 1974; Kole & Busse, 1969; Linn & Busse, 1971; Rawson, 1973a, 1973b). Such studies indicate that positive change requires stimulating the child's interest and sufficiently controlling a number of elements in his environment. Therapeutic camping programs have long been widely advocated because of their potential for a high degree of environmental control and their appeal to children (McNeil, 1957).

Camping was originally reported by Mitchell (1950) to benefit well-to-do boys so they wouldn't "idle" away. Considered constructive, goal-directed activity (Bettelheim, 1952), it was believed to aid character building and avoid undirected behavior. An example can be found in the objectives of the Boy Scouts' camping programs. Their well-known motto--Be Prepared--expresses the content of their programs. Great effort in developing the Boy Scouts to include task centered recreation is evident (i.e., merit badges). In this way, the Boy Scouts might be considered a therapeutic program. Needless to say, the Boy Scouts continues to be a successful organization. It grew in size 9.4% over the last year in Denver (Annual Report, 1974).

At first, the pattern of camping programs was structured and under the supervision of adult models (McNeil, 1957). Special camp programs were developed for delinquent youths to serve their sentences away from the urban environment. The "fresh-air" programs

for the poor were a logical extension and provided an opportunity for underpriviledged children to experience a change from city life. In the past two decades the nature of camping programs changed from a disciplinary activity to one of psychological self-reliance (Bettleheim, 1952; McNeil, 1957). The development of survival training programs (i.e., Outward Bound) has opened the door for many professionals to utilize the wilderness in therapeutic ventures.

Literature pertinent to outdoor therapeutic intervention programs may be classified into two kinds of programs: 1) survival training programs which primarily aim to teach wilderness survival skills and as a by-product develop person growth and 2) outdoor therapeutic camping programs whose foremost goal is to develop personal growth (i.e., attitudinal change and behavioral change through the medium of the wilderness). In the latter, development of survival skills is an instrument of the program, not the primary concern. Rather, the concern is the individual. Both types of programs are similar in nature, however, their priorities are reversed.

Outdoor Survival Training Programs

Outdoor survival training is frequently viewed as a potential tool for improving interpersonal skills and personal self-concepts (Adams, 1969; Hoag, 1970; Howard, 1970; Wohlwill, 1970; Lieberman, 1971; Willman & Chun, 1973; Kaplan, 1974). These programs emphasize learning to deal with nature both alone and as a member of a group. Survival training presents an individual or group with a natural environment--wilderness--with few artifacts in a struggle for

survival. Survival training emphasizes stress experiences which push the person beyond his usual performance. Such tasks as mountain climbing, white water river running, living off the land alone for a few days, and demanding search and rescue missions are common. The development of necessary survival skills seems to include the development of intra- and inter-personal skills in group discussions, decision making, relating with instructors, and living under stress. Barcus and Bergesen (1972) feel these wilderness experiences force people to stretch their perceived potentials to broader boundaries.

Outward Bound is the most well known survival training program presently in operation (Colorado Outward Bound School, 1969; Grossman, 1967). It has involved a broad spectrum of people. Their programs usually fill with young men in their teens and early twenties. However, groups have included businessmen, delinquents, college student groups, and groups of professional youth leaders. Outward Bound specifies several goals which seem prevalent across most survival programs: 1) establishment of constructive relationship between participant and instructor (authority figure); 2) learning to work in a group as a unit; and 3) enhancing self-image by both physical and mental survival challenges. Outward Bound uses a variety of experiences in its survival training. Activities begin with physical and psychological warming-up exercises at a base camp often involving learning to make group decisions and to work together on a relatively simple task (i.e., building a fire). From this, they move on to more and more demanding tasks (i.e., technical mountain climbing)

culminating with a three-day solo survival in the wilderness.

It has been reported by Barcus and Bergesen (1972) that survival training is used as therapy for disturbed adolescents. They report placing patients in survival training to given them a new assessment of their personal resources. As a result of Outward Bound's apparent success many other private organizations have developed similar programs with a variety of purposes.

Several colleges sponsor survival training programs. Brigham Young University places college dropouts who desire reinstatement in survival training programs as a prerequisite for returning to school (Howard, 1970). BYU officials hypothesize that survival training strengthens self-concept and this increased self-concept generalizes to one's feeling about academic ability. The University of Colorado sponsors a mountaineering program that is available to students on a volunteer basis (Bower, Personal Report, 1974). Major emphasis of this program is on physical endurance and stamina rather than survival and no formal evaluation has been performed. Prescott College in Prescott, Arizona uses a rugged survival training program to orient all new students to college life (Prescott College Outdoor Action and Orientation Program Bulletin, 1970). Specifically what the benefits are is very vague. Colorado College has implemented survival training programs for dormitory counselors (Colorado Outward Bound, C-53, 1970).

Maynard (1969) carried out a study in 1966 to determine the effect of Outward Bound on the attitudes of a group of youths from slum areas. It was found that, compared to a control group, the

youths in the Outward Bound program "began to develop those attributes of character which act as a foundation for achievement motivation and for mature social participation." Specifically, he found Outward Bound youths showed significant changes in attitude by seeing themselves as stronger and more active, and generally more positive and less alienated.

A study conducted in 1967 by Maynard (1969) attempted to determine if the Outward Bound experience was effective in keeping juvenile delinquents out of further trouble with authorities. The study showed that a year after the experiment, only 20 percent of the youths had been returned to juvenile or adult institutions. This is about one-half of the usual recidivism rate. Maynard's findings are supported by Kelley and Bear (1968, 1971) and Willman and Chun (1973) who performed similar studies on juvenile offenders in survival programs.

The Outward Bound experience was included as part of a senior seminar at East High School in Denver. The Outward Bound Bulletin 1968 reported that 93 seniors including a group of 25 "target" students, who had college potential but were low achievers, spent the first two weeks of the project on a survival trip in Mexico. They later floated the Yampa and Green Rivers in Colorado. It should be noted that there is no way of separating the effect of survival training in the out-of-doors from the total experience of the program or the volunteer aspect of the selection. However, the target group had a school dropout rate of 2.2 percent, while the senior class at East High School experienced an 11.5 percent. Thus, it appeared that participation in the program was effective.

More sophisticated studies have been performed to get a more accurate assessment of the psychological effects of survival training. Moses and Peterson (1970) compared three approaches to improving grade point averages of low achievers: A = sensitivity training; B = survival training and C = control (no special training). In evaluating the results, the limitations in methodology because of inconsistent sample size (A = 14N, B = 44N, C = 45N) must be considered. The greatest increase in average GPA over one semester reported by the authors occurred in Group A (+.76 points on a 4 point scale); however, group B had an increase of .47 over each of three quarters while the control group only had an increase of .07 over three quarters. The results, then, do suggest survival training to possibly be of value as an aid in the development of better academic performance.

Howard (1970) used the Tennessee Self Concept Scale Counseling Form to assess effects of a 26-day survival training experience on self-concept. Twenty-five subjects were tested immediately before and after the experience and post testing indicated significant change on thirteen of the nineteen scales. Howard reports "on almost every scale the post-testing mean moved closer to the national mean." Furthermore, he stated that "on those scales where it was desirable to be below or above the national mean, the post-test mean had moved toward the desirable position (page 35)." His lack of maintaining a control group jeopardizes the validity of the assumptions. However, subjects did personally report improved self-image in physical, moral-ethical, personal, family and social self-concepts. Self-satisfaction and self-esteem

significantly increased. And, survival training as in previous cases was concluded to be effective in stimulating significant improvements of feelings toward oneself.

Another researcher (Adams, 1969) used the Tennessee Self-Concept Scale and the 16PF test to evaluate the effects of survival training. Seventeen adolescent patients at the Wyoming State Mental Hospital participated in a 30-day survival training program. Subjects were pre- and post-tested. The 16PF test results indicated a significant decline in neuroticism after the survival training experience and trends toward increased ego strength, conscientiousness, acceptance, adaptability, composure, and tranquility were indicated but did not reach a significant level.

Belief in the positive value of survival training is demonstrated by its implementation in many ways. Furthermore, a wide variety of sources exclaim its effectiveness, from college professors (Norin in Prescott College Bulletin, 1973) to countless participants. Their testimonials carry many common themes of personal growth (i.e., increased self-confidence, new awareness of personal capabilities, development of personal and physical resources, increased social skills). Drastic changes in self-concepts were indicated by participants in survival training programs. The only negative reactions were usually voiced in regard to physical dangers that are an integral part of survival training experiences. However, participants more commonly come out only fatigued with a minimal weight loss.

In summary, the formal evaluations made of outdoor survival training programs are minimal but the informal evaluations which

Table 6

Subject Sample Winter WEP 1974

Agency:	Initial Sample Exp. M	Exp. F	Con. M	Con. F	Completed Sample Exp. M	Exp. F	Con. M	Con. F
Fort Logan	7	4	3	3	4	3	2	3
Jeffco Welfare	8	5	3	2	8	5	2	2
DU Child Study Center	7	1	2	0	6	0	2	0
Jeffco Schools (Child Res. Team)	3	1	1	1	3	1	0	1
Denver City Schools	3	0	2	0	2	0	2	0
Arapahoe Mental Health Center	2	0	0	0	2	0	0	0
Gilpin House	2	6	3	3	2	5	1	2
Westside Counseling	2	0	0	0	2	0	0	0
Capitol Hill Recreation Center	6	3	3	4	5	3	0	3
Total	40	20	17	13	37 (54)	17	9 (20)	11

Ethnic:	Completed Sample Exp.	Con.	Denver County
Black	5 (9.25%)	4 (20%)	10%
Chicano	7 (14.8%)	5 (25%)	26%
White	41 (75.9%)	11 (55%)	61%
Other	0	0	3%

Problem Category: as identified by referring agency	Completed Sample Exp.	Con.
Social Adjustment	24	7
Emotional	18	6
Educational	3	5
Behavior Problem	5	2
Poor Self Concept	2	0
No Identified Problem (high incidence area)	2	0

Age:	Completed Sample Exp.	Con.
Mean	12.15	12.06
Range	8-15	8-15

Option:	Previous Participation Complete Data	Previous Participation Incomplete Data	No Previous Particip. Complete Data	No Previous Particip. Incomplete Data
#1 (continue days)	2	0	2	2
#2 (overnights)	26	0	24	0
#3 (deselection)	0	1	0	3

Instruments

The Peirs-Harris (1963) Self-Esteem Measure (SEM) 80-item edition by Wing (1966) and again, Coopersmith's (1967) Behavior Rating Form (BRF) were used to evaluate the achievement of the goals of Winter WEP 1974. Coopersmith's (1967) Self-Esteem Inventory was discarded in favor of the Peirs-Harris because it was more easily understandable to the youths. The Peirs-Harris, Wing (1966) edition of the Self-Esteem Measure was divided into two equal sections, Form A and Form B (Appendix E and F) to facilitate administration. The administration of this inventory was, then, counterbalanced for practice effects by requiring half the total group to fill out Form A first and half the total group to fill out Form B first. After a short rest period, the corresponding switch in forms was made. Again, the forms were read aloud as in WEP 1973 to control for nonreaders. Each form took 12 to 15 minutes to complete. Along with the leader in reading, another staff member monitored the situation to make sure that everyone was keeping up and not just randomly responding.

Coopersmith's (1967) Behavior Rating Form (Appendix C) was filled out by raters who were knowledgeable of the youth's reason for participation and on the post and follow-up measure by a blind rater also. (No blind raters were used at pre testing, i.e., blind indicates the rater was unaware of whether a youth was a control or an experimental.) This served the purpose of checking inter-rater reliability, which turned out to be .84. The mean number of BRF's returned on each subject was 2.18 for each testing point with a range of 1 to 4. This was variable because some subjects lacked "knowledgeable